ANNUAL REPORT 2017-18

National Irrigation Commission Limited

Irrigation...Making the Difference in Agriculture

Vision

To be the regional leader in the provision of world-class irrigation services.

Mission

To meet the needs of our customers by delivering high quality irrigation services driven by competent staff, technology, innovation and collaboration with partners.

Core Values

- Teamwork
- Respect
- Excellence
- Commitment/ Customer-Centric
- Knowledge-Driven
- Sustainability

What's Inside

Corporate Profile

Who We Are

The National Irrigation Commission Limited (NIC) is an agency of the Ministry of Economic Growth and Job Creation.It was established under the Companies Act of Jamaica in 1986. The organisation obtains its authority from the Irrigation Act,1949, under which the Commission is required to furnish and maintain efficient irrigation systems throughout declared irrigation areas in accordance with reasonable standards of dependability required in irrigation operations.

What We Do

The purpose of the NIC is to manage, operate, maintain and expand the existing and future irrigation schemes and systems established by the Government of Jamaica. The organisation's operations covers three regions and comprise fourteen irrigation schemes and a drainage area.

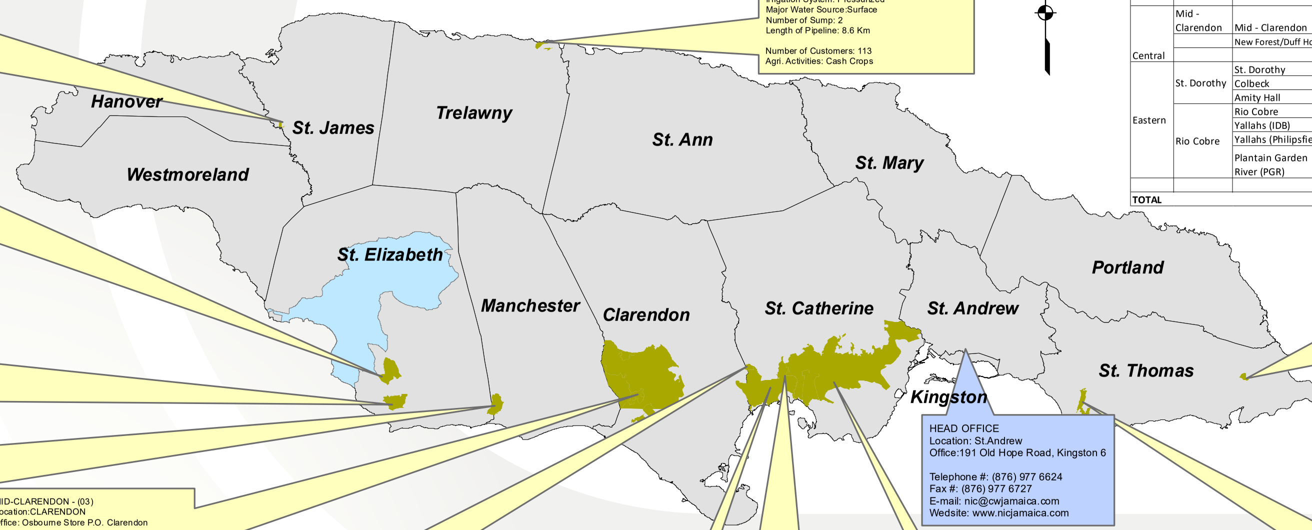
Irrigation services are provided primarily to agricultural and industrial users in the eastern, central and western regions of Jamaica as follows:

Eastern Region:	**St. Catherine:** Rio Cobre, St. Dorothy, Colbeck and Amity Hall **St. Thomas:** Yallahs, Yallahs IDB and Plantain Garden River
Central Region:	**Clarendon:** Mid-Clarendon and Ebony Park/Spring Plain **Manchester:** New Forest/Duff House
Western Region:	**St. Elizabeth:** Hounslow and Pedro Plains (Beacon/Little Park) **St. James:** Seven Rivers **Trelawny:** Braco

The NIC also provides drainage services in the Black River area. This area refers to that portion of the Black River including the banks, from the sea to Lacovia Bridge, the Upper Morass area; the Y.S. River area, the areas described in the Additional Areas (Parish of St. Elizabeth) Reclamation Order, 1953, published in the Jamaica Gazette Supplement Proclamations, Rules and Regulations on the 26th day of January, 1953; and other areas in the parish of St. Elizabeth as the Minister may, by order, specify for the purposes of the Irrigation Act.

MAP OF IRRIGATION DISTRICTS

Region	District Main Office	Location	CONVEYANCE Canal Length (KM)	CONVEYANCE Pipeline Length (KM)	PUMP RELIFT	PUMP DEEP WELL	GrossArea (Ha)
Western	Hounslow	Hounslow		41.4		5	**1,038.40**
		Beacon Little Park		27.4		3	**806.00**
		Sevens River		3			**50.40**
		Braco		8.6	2		**159.12**
Central	Mid - Clarendon	Mid - Clarendon	132	50	6	32	**13,442.30**
		New Forest/Duff House		27		4	**654.42**
Eastern	St. Dorothy	St. Dorothy	36	15	1	12	**4,440.53**
		Colbeck		5.5		1	**136.22**
		Amity Hall					**1,289.94**
	Rio Cobre	Rio Cobre	65	31	3	28	**13,593.41**
		Yallahs (IDB)		15.04		2	**473.00**
		Yallahs (Philipsfield)		4.18		1	
		Plantain Garden River (PGR)		15	1		**117.10**
TOTAL			**233**	**243.12**	**13**	**88**	**36,200.84**



SEVEN RIVERS - (07)
Location:St.. James
Office: Watchwell, Watchwell P.O.
St. Elizabeth

Total Area: 124 Ac (50.4 Ha)
Active Area: : 45.5 Ac (18.41Ha)
Irrigation System: Pressurized
Major Water Source:Surface
Number of Sump: 1
Length of Pipeline: 3 Km

Number of Customers: 12
Agri. Activities: Orchard, and Cash Crop

HOUNSLOW - (04)
Location:St. Elizabeth
Office: Watchwell, Watchwell P.O.
St. Elizabeth

Total Area: 2,566 Ac (1,038.40 Ha)
Active Area: 1,800.09 Ac (728.49 Ha)
Irrigation System: Pressurized
Major Water Source:Ground
Number of pumps: 5
Length of Pipeline: 41.4 Km

Number of Customers:530
Agri. Activities: Cash Crops, Livestock

BEACON/LITTLE PARK - (08)
Location:St. Elizabeth
Office: Watchwell, Watchwell P.O.
St. Elizabeth

Total Area: 1,991 Ac(806Ha)
Active Area: 986.90 Ac (399.39 Ha)
Irrigation System: Pressurized
Major Water Source:Ground
Number of pumps: 3
Length of Pipeline:27.4 Km

Number of Customers: 351
Agri. Activities: Cash Crops

NEW FOREST/DUFF HOUSE - (10)
Location:Manchester
Office: New Forest, New Forest P.A.
Manchester

Total Area:1617 Ac (654Ha)
Active Area: 878.34 Ac (355.46 Ha)
Irrigation System: Pressurized
Major Water Source:Ground
Number of pumps: 4
Length of Pipeline:27 Km

Number of Customers:355
Agri. Activities: Cash Crops

MID-CLARENDON - (03)
Location:CLARENDON
Office: Osbourne Store P.O. Clarendon

Total Area:32,760 Ac (13,442.3 Ha)
Active Area: 5,313.86 Ac (2,150.49 Ha)
Irrigation System: Pressurized, & Canal
Major Water Source:Ground & Surface
Number of pumps:39
Length of Pipeline:50 Km
Length of Canal: 132 Km

Number of Customers:416
Agri. Activities: Sugar Cane, Cash Crops, Poultry

COLBECK - (09)
Location: St. Catherine
Office: Bodles , Old Harbour P.O.
St. Catherine

Total Area:337 Ac (136 Ha)
Active Area: 217.01 Ac (87.82 Ha)
Irrigation System:Pressurized
Major Water Source:Ground
Number of pumps:1
Length of Pipeline:5.5 Km

Number of Customers: 73
Agri. Activities: Cash Crops

ST. DOROTHY - (02)
Location:St. Catherine
Office: Bodles , Old Harbour P.O.
St. Catherine

Total Area:10,972.8 Ac (4,440.53 Ha)
Active Area: 1,068.11 Ac (432..26 Ha)
Irrigation System:Pressurized & Canal
Major Water Source:Ground & Surface
Number of pumps:5
Length of Pipeline15 Km
Length of Canal: 36 Km

Number of Customers: 391
Agri. Activities: Sugar cane, Cash Crops, Fish, Poultry

AMITY HALL - (15)
Location:St. Catherine
Office: Bodles , Old Harbour P.O.
St. Catherine

Total Area:3187.52 Ac (1,289.94 Ha)
Active Area: 75 Ac (30.35 Ha)
Irrigation System:Pressurized
Major Water Source:Surface
Number of Sumps:1
Length of Pipeline:

Number of Customers: 14
Agri. Activities: Cash Crops, Orchard Crops

RIO COBRE - (01)
Location: Spanish Town and its Environs
Office:17 Barrett Street, Spanish Town

Total Area:33,589.314 Ac (13,593.41 Ha)
Active Area: 10,609.53 Ac (4,293.62 (Ha)
Irrigation System:Pressurized & Canal
Major Water Source:Ground & Surface
Number of pumps:24
Length of Pipeline:31 Km
Length of Canal: 67 Km

Number of Customers: 234
Agri.Activities: Sugar Cane,Cash Crops, Fish and Poultry

BRACO - (05)
Location:Trelawny
Office: Duncan Main Street, Duncan P.O. Trelawny

Total Area: 393.19 Ac (159.12 Ha)
Active Area: 323.25 Ac (130.82 Ha)
Irrigation System: Pressurized
Major Water Source:Surface
Number of Sump: 2
Length of Pipeline: 8.6 Km

Number of Customers: 113
Agri. Activities: Cash Crops

HEAD OFFICE
Location: St.Andrew
Office:191 Old Hope Road, Kingston 6

Telephone #: (876) 977 6624
Fax #: (876) 977 6727
E-mail: nic@cwjamaica.com
Wedsite: www.nicjamaica.com

PLANTAIN GARDEN RIVER (PGR) - (14)
Location: ST. Thomas
Office:Yallahs P.O. St. Thomas

Total Area: 289.28 Ac (117.10 Ha)
Active Area: 112 Ac (45 Ha)
Irrigation System:Pressurized & Canal
Major Water Source:Surface
Number of pumps:1 (diesel)
Length of Pipeline 15 Km

Number of Customers: 23
Agri. Activities: Cash Crops

YALLAHS (06) & YALLAHS IDB - (13)
Location: ST. Thomas
Office:Yallahs P.O. St. Thomas

Total Area: 1,167.90 Ac (473 Ha)
Active Area: 170.47 Ac (68.99 Ha) ; 246.58 Ac (99.79 Ha)
Irrigation System:Pressurized & Canal
Major Water Source:Ground
Number of pumps:3
Length of Pipeline 22 Km

Number of Customers Yallahs: 92 and Yallahs IDB : 142
Agri. Activities: Cash Crops

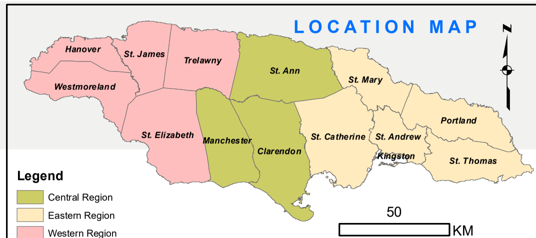
Date: As at March31, 2018

Legend

BLACK RIVER DRAINAGE AREA
DISTRICTS
PARISH BOUNDARY

SCALE 1:1,920,690

20 10 0 20 40 60 80 100 120 140 KM



Minister of Economic Growth and Job Creation

Irrigation water is critical to the economic growth and development of the country; and the Government of Jamaica, through the Ministry of Economic Growth and Job Creation, is committed to the development of the sector.

In light of this commitment, the government through the National Irrigation Commission Limited (NIC), has embarked on a programme to rehabilitate several irrigation systems across the island that have deteriorated over many years. It is the intention of the government to use the entire quota from the Infrastructure Fund for irrigation as well as seek additional funding from our multilateral partners where necessary, to facilitate work to be done.

The NIC has achieved much success this year. The commissioning of a $30.3 million industrial pump and irrigation system in New Forest/Duff House, St. Elizabeth,through funding from the World Bank and partnership with the Jamaica Social Investment Fund and the commencement of the Essex Valley Agricultural Development Project, St. Elizabeth which will cost some $5.7 billion, will further put the organisation in a position to serve hundreds of farmers and ultimately grow the agricultural sector and economy.

As we continue to improve our irrigation infrastructure, the government has allocated funds in the 2018/2019 budget to commence work later this year on irrigation systems in St. Catherine and Clarendon under a $100-million infrastructure rehabilitation project. The project, which is being implemented by the NIC will reduce water losses and operational costs of select irrigation systems in St. Catherine and Clarendon.

I wish to commend the Board of Directors, Chief Executive Officer (CEO) and members of staff for their work to to provide reliable, efficient and affordable irrigation water to our farmers. As we are well aware, the development of the agricultural sector is an important contributor to not only our Gross Domestic Product (GDP), but also to employment, foreign exchange earnings and the general improvement in the lives of many ordinary Jamaicans.

Hon. Dr. Horace Chang
Minister Without Portfolio
Ministry of Economic Growth and Job Creation

Board Chairman

An efficient government and a high performing agricultural sector are key factors to a high and sustained economic growth. A proper irrigation system is paramount to a successful agricultural sector.

The Board of Directors, management and staff of the National Irrigation Commission (NIC), are aware of the fact that we cannot get that growth rate without a consistent supply of water and a constantly improving irrigation system and network. Water is life and the NIC has the lead role in providing adequate supplies to the various stakeholders who depend on the Commission.

The recently redefined mission of the organisation is to, "Meet the needs of customers by delivering high quality irrigation services driven by competent staff, technology, innovation and collaboration with our partners". The NIC's 2018-2012 Strategic Plan charts the course for this mission and provides the framework for major strategic direction which will guide the operations of the organisation over the next few years.

Some of the areas of focus over the next couple of years will be to:

- Update and implement policies to strengthen corporate governance in the areas of transparency and accountability;
- Improve development, implementation and empirical evaluation of strategic plans;
- Increase access to project funds to expand irrigation water in support of climate change and food security initiatives; and
- Institute cost containment strategies to optimise service delivery.

The members of the Board will provide the necessary guidance and governance support to move the Commission forward to achieve its goals. We thank the management and staff of the NIC for all their work over the past year and our many partners and stakeholders for their continued commitment to the organisation.

Senator Aubyn Hill
Board Chairman

Chief Executive Officer

In fulfilment of its mandate to expand irrigation systems across Jamaica, the National Irrigation Commission Limited has sought to align its focus and operations to support the economic growth and job creation agenda of the Government of Jamaica.

As the availability of water is one of the key pillars to support economic growth and prosperity, the Commission's strategic initiatives for 2017/2018 include the enhancement of irrigation services by facilitating value added support to our farmers, and the expansion of irrigated agricultural production and productivity through the establishment of strategic alliances with key stakeholders.

We are confident that our thrust will provide sufficient water to contribute to increased agricultural production and enhanced food security as outlined in the Vision 2030 National Development Plan.

Some of the achievements and contributions during the year, included the following:

- Rehabilitation of the Old Harbour Branch canal in St. Catherine – Installation of 203 meters of High Density Polyethylene (HDPE) pipes and 370 meters of prefabricated concrete slab to reduce water losses and improve service areas. This improved irrigation service to 700 hectares of land and 40 farmers, while providing employment for over 40 skilled and unskilled labourers.

- Lower Main Canal Embankment Protection in St. Catherine - Installation of gabion baskets to protect 81 metres of earthen canal from soil erosion. This provided improved service to 1,391 hectares of land.

- Rehabilitation of Old Milk River Canal in Clarendon – Installation of 1,409 metres of high density polyethylene (HDPE) pipes to replace concrete canal. Thirty farmers benefitted from improved service on 200 acres of land, while providing employment for 35 skilled and unskilled labourers.

- Commencement of works for the Essex Valley Agricultural Development Project which is expected to enhance the production and productivity of over 700 farmers on 718 hectares of arable land in Essex Valley in St. Elizabeth, and

- Savings of 6.78% in energy cost, valuing $17.24 million, by implementing cost savings measures such as irrigation scheduling, rates changes and installation of variable frequency drives.

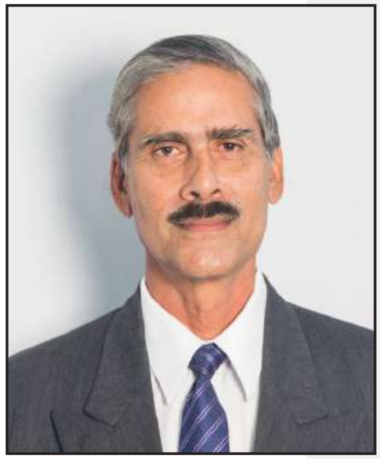
I am grateful for the support of the Board of Directors, management and staff of the NIC for all their work this year. Their guidance and input has raised the standard of our operations and the results have been forthcoming.

As we look to the future, we anticipate greater efficiency in the organisation's overall operations and further advancement of our work to expand irrigation services across the country.

Joseph Gyles, J.P.

Board of Directors

Senator Aubyn Hill
Chairman



Dr. Horace Charoo
Deputy Chairman

Theresa Turner

Krishan James

Anthony Masters, Jr.

George Wright

Rupert Williams

Sharon Williamson

Robert Martin

Genille Attalla

Ralden Bellanfante

Nigel Myrie

Joseph Handal

Venice Williams
Corporate Secretary

District and Advisory Monitoring Committees

Saint Elizabeth

Krishan James – Chairman

John Davis
Linzo Manderson
Orlando Nembhard
Nathan Samuels
Denese Palmer
Aslyn Parchment
Sylton Sibblis
Chandia Walters
Neil Wright

Braco, Trelawny

Genille Attalla – Chairman

Vincent Blair
Kenneth Binns
Alex Campbell
Ronique Henry
Iru Linto
Stacey Mason
Courtney Taylor
Donovan White
Rachel Webb

Saint Catherine

Joseph Handal – Chairman

Trevor Garvey
Andre Griffiths
Jennifer Hull
Keith Knight
Carlene Martin
Sydney Roman
Cecil Taylor
Theresa Turner

Mid-Clarendon

Dr. Horace Charoo – Chairman

Baldwin Atkins
Ralden Bellanfante
Donovan Hinds
Marvin Lawrence
Andrew Lodenquai
Owen Scarlett
Easton Thompson

Executive Management Team

Joseph Gyles, J.P.
Chief Executive Officer

Edgar Watson
Director of Finance and Corporate Planning

Wayne Barrett
Director of Commercial Operations

Rohan Stewart
Director of Engineering and Technical Services (Actg.)

Viola Cammock
Director of Corporate and Legal Services

Milton Henry
Project Director (Actg.)

Corporate and Legal Services Division

The objectives of the Corporate and Legal Services Division are:

- To develop a cadre of professionals through human resource programmes which strengthen and expand staff competencies and enhance the delivery of service to our customers.
- To implement and monitor the administrative systems, procedures and policies of NIC.
- To ensure protection of NIC's assets and legal rights and to provide an efficient support system through general office services.

The Division provides oversight for the following:

Administrative and General Services, Human Resource Management and Industrial Relations, Training and Development, Legal Services, Property and Transport as well as the Occupational, Health and Safety Unit.

HUMAN RESOURCES DEPARTMENT

During the year, some of the key programmes undertaken by the Human Resources Department in support of the strategic direction of the Commission included:

Training and Development

The Training and Development Unit is responsible for coordinating and implementing appropriate educational and training initiatives to ensure that staff competencies support the organisational needs.

A total of 31 capacity building programmes for staff were implemented throughout the year. Four hundred and sixty (460) participants were trained in 48 groups in various disciplines and across all levels of staff. The initiatives which totalled 633.5 hours were in the form of in-house training sessions and external seminars.

Staff training session at NIC's Head Office in Kingston.

Human Resource Management Information System

The Department commenced automation of key human resource processes utilising an upgraded Human Resource Management Information System. This involved the comprehensive electronic inputting and updating of the employee database. It is anticipated that by the next financial year, employees will be able to electronically access, request and process certain services required from the Human Resources Department with greater ease and efficiency.

Scholarship Awards Programme

Eight students were awarded scholarships in the amount Nine Hundred Seventy Thousand Dollars ($970,000.00) in 2017/2018 under the Commission's Scholarship Awards Programme. Established in 1998 as an initiative between the organisation and the unions representing workers, scholarships are offered to children of permanent employees based on academic performance, involvement in extra curricular activities and deportment.

NIC's Board Chairman, Senator Aubyn Hill (right) presents a cheque to secondary-level scholarship recipient, Abigail Pollack at the organisation's awards ceremony in March 2018.

Involvement in Youth Empowerment Programmes

The NIC has in place an annual Summer Workers Employment Programme for secondary and tertiary students, 17 to 25 years, which seeks to provide meaningful work experience, mentoring and training in their preparation for the workforce.

This year the organisation partnered with the National Youth Service Corps in its Housing, Opportunity, Production and Employment (HOPE) initiative, which is a training and apprenticeship programme for unattached youth who are not employed or engaged in training.

The NIC offered employment to 37 summer workers and five HOPE interns for the year, and plans to continue with the partnership with HOPE in the coming years.

Information Systems Administrator Leonie Walker assists Wayne Barrett, Director of Commercial Operations at staff meeting in Mandeville, April 2017.

PROPERTY AND TRANSPORT UNIT

Transport

The Property and Transport Unit continues its cost cutting initiatives to decrease petrol consumption for the organisation's motor vehicle fleet. The average savings for April 2017 to March 2018 on petrol is 35.5 per cent, exceeding the 10 per cent target.

Property

The Unit is working alongside our Legal Services section to secure the vesting property rights of the National Irrigation Commission Limited. Targeted lands are those occupied by pump houses, canals and pipelines used for the distribution of untreated water. A property portal has been created for pump houses and wells and is being populated with relevant data that may be unique to individual pumping equipment.

Occupational Safety and Health

Paramount to our work is the promotion and implementation of policies that mitigate against occupational hazards in our work environment. This is carried out by continuously conducting risk and hazard assessments to determine where hazards exist and taking action to prevent them. As a result, the NIC implemented an enhanced, personal protective equipment programme to ensure employee safety in the field and workshop.

As we await the enactment of the country's Occupational Safety and Health Act along with its supporting regulations, the Occupational Safety and Health Unit continues to update its policy to ensure compliance with national and international standards.

Notice to residents along canals.

LEGAL SERVICES UNIT

During the period April 2017 to March 2018, the Legal Services Unit had oversight for:

- Implementation of strategies to protect the Commission's irrigation infrastructure through securing lands for reservations and the acquisition of easements.
- Execution of the Vesting Project to bring on to the books, lands of the Commission which were not acquired at the time of incorporation of the organisation.
- Provision of adequate insurance values for property.
- Managing, litigation and negotiating claims against the Commission in a cost effective manner.
- Facilitating effective corporate governance mechanisms.

There were four cases during the financial year involving wrongful dismissal, debt recovery, negligence and wrongful death. Three of these matters reside in the Supreme Court and are ongoing. The matters of wrongful dismissal and debt recovery are set for trial dates in 2018.

Vesting Project

The NIC is required, under the Irrigation Act, to register its interest in properties within the declared irrigation areas by way of a Vesting Order. Despite the framework set out by the Act, no procedural steps were established to obtain the Order.

As a result of the delay in registering the Commission's land interest, several issues have arisen including the following:

- An increase in the number of squatter settlements along canal infrastructure.
- Claims for negligence by landowners whose properties are flooded from blockages in watercourses.
- Titles being issued to private landowners without the interest of the Commission being noted.
- Limited capacity to pursue matters of encroachment in the Courts as the Commission does not hold registered title to canal lands.

The aim of the Vesting Project is to determine the local and condition of the infrastructure owned and controlled by the Commission, the ownership of lands upon which these infrastructure have been established and to implement a plan of action to guide the acquisition of the identified properties. The benefit of this project will the consolidation of the organisation's fixed asset portfolio with projected increases in its fixed asset holdings.

Commissioning of a new $30.3 million industrial pump in May 2017. The system will serve the New Forest/Duff House agro park in Manchester. It was jointly funded by the World Bank, through its Rural Economic Development Initiative being implemented by the Jamaica Social Investment Fund and the National Irrigation Commission Ltd.

Public Relations Unit

DISPLAYS, EXHIBITIONS AND PROMOTIONAL EVENTS

The NIC participated in several displays, exhibitions and promotional events throughout the year. These included:

- Presentation on "Water Management Techniques with Emphasis on Rainwater Harvesting", at Freetown Primary School in Clarendon in April 2017 as part of a Biodiversity Awareness Programme implemented in primary schools by the Natural History Museum of Jamaica.

- Participation in the 2017 Denbigh Agricultural, Industrial and Food Show held in August that year. NIC's display included a greenhouse fully stocked with vegetable seedlings. It also showcased rainwater harvesting techniques.

- National Ceremony and Exhibition for World Food Day at Knockalva Agricultural School in Ramble, Hanover.

- Eat Jamaican Day Exposition, hosted by the Jamaica Agricultural Society (JAS), in collaboration with the Ministry of Industry, Commerce, Agriculture and Fisheries, under the theme, "Grow What We Eat, Eat What We Grow".

- World Wetlands Day Exhibition, hosted by the National Environment and Planning Agency (NEPA) under the theme, "Wetlands for a Sustainable Urban Future" in St. Catherine.

- Hague Agricultural and Livestock Show at the Hague Show Grounds in Trelawny. The NIC displayed growing plants and seedlings, banners, posters and a model depicting the organisation's irrigation operations.

- World Water Day Competition and Exhibition hosted by Ministry Economic Growth & Job Creation in Kingston.

The Public Relations Unit will continue to strengthen internal and external communication with increased, regular and structured outputs. The Unit will increase its online presence to include the expanded use of social media so as to better capture and interest stakeholders and the general public in the work of the organisation.

Staff members of the NIC out and about promoting the work of the organisation.

Engineering and Technical Services Division

The Department of Engineering and Technical Services corporate objectives are to improve efficiencies in conveyance and delivery of irrigation water, to enhance the quality and reliability of service as well as designing irrigation systems for the improvement and expansion of irrigated agriculture. To accomplish these objectives, we employ and incorporate a series of skill sets and professions to include civil, design, electrical, energy, mechanical, operational hydraulic engineering, management and security.

Commendation is in order for the staff, as despite an unusually rainy year, they used innovativeness and commitment, which enabled them to contribute to the accomplishment of some of the overall corporate objectives of the Commission.

CIVIL UNIT

Maintenance and Improvement

The Civil Unit continued their effort of improving the system maintenance as well as completing new customer connections, disconnections and reconnections. **Table 1** below shows the areas and works that were done for the period. It should be noted that these projects were done using the forced accounts methodology, which aided in the expeditious completion within timeline and budget. In addition, two Capital A rehabilitation Projects were executed: In Clarendon, the Old Milk River Canal, and in St. Catherine, the Old Harbour Branch canal.

Works were done in two earlier phases on the Old Milk River Canal. Phase 3 included restoring canal steel pipe crossing at Fleming's Gully, which failed after heavy flood waters and the laying of four hundred and six meters (406m) of High Density Polyethylene (HDPE) 900mm pipes ending at the Decoy Canal take-off.

Phase 4 of the project involved the installation of approximately two hundred and thirty meters (230m) of HDPE Pipe to replace leaking canal and the construction of one inspection and Washout Chamber.

The final section that was tackled representing Phase 5 saw the rehabilitation of the Old Milk River Canal at Decoy Road Crossing; changing defective culvert and restoring roadway. It also consisted the replacing of 800m of derelict canal west of Comfort Road with 900mm HDPE steel reinforced drain pipes. Three inspection chambers with washout or service valves were also constructed.

Repairs to conveyance infrastructures (canal and pipeline) were undertaken during the period of review. This included the restoration of pipelines that were damaged during flood rains in May 2017 and the reconstruction of collapsed canal.

Table #1: Summarising the civil department activities

Region	Districts	Activity	Funding Source	Impact
	Head Office	Completion of shipping container conversion to Project Office Building	GOJ	Provided space for project staff
		Construction of water storage tank base	GOJ	Improved water reliability to Project Office
Eastern	Rio Cobre	Repaired canal Bushy Park Route 2	GOJ	Reduced (seepage and overflow) water loss
		Installation of gates and flumes at Little Hartlands, Bushy Park and Hill Run	GOJ	Provided measured water supply to customers
		Pipeline and hydrant repaired throughout the Region	GOJ	Reduced water loss and property damage and maintained system integrity
		Addition of bathrooms and Manager's Office to Op Centre Board-room being used as the Rio Cobre Office	GOJ	Improved quality of working condition and service quality to staff and customers
	Yallahs	Office expansion	GOJ	Improved quality of working condition and service quality to staff and customers
	Operation Centre	Kitchen and bathroom improvement works (minor)	GOJ	Maintained quality amenities for staff and customers
	St. Dorothy	Repaired unearthed HDPE pipe	GOJ	Restored infrastructure integrity
		Workshop office roof repairs and fencing improvement	GOJ	Reduced risk to staff & customers, and extended the service life of the declining structures
		Repaired canal at Line E, Bodles Crescent and Distributary C	GOJ	Restored infrastructure integrity and reduced water loss from seepage
		Installed gate and flume on the Main Canal	GOJ	Provided measured water supply to customers

Region	Districts	Activity	Funding Source	Impact
Central	Mid-Clarendon	Relocated and re-established unearthed pipeline at Spring Plain after storm water impact	GOJ	Restored infrastructure integrity for improved conveyance and service to customers
		Painting office building	GOJ	Improved aesthetics of building
		Improvement to kitchen/lunchroom (counter top and cupboard)	GOJ	Improved aesthetics of kitchen/lunchroom for staff
		Repair to collapsed Main Canal section at St. Ann's Gully	GOJ	Improved infrastructure and service to customers
Western	Hounslow	Fencing of office compound	GOJ	Improved security of the compound

Rio Cobre Diversion Dam

Figure #1: Canal bottom with cracks before rehabilitation work

Figure # 2: showing Phase 4 of the project involved the installation of HDPE pipe to replace leaking canal

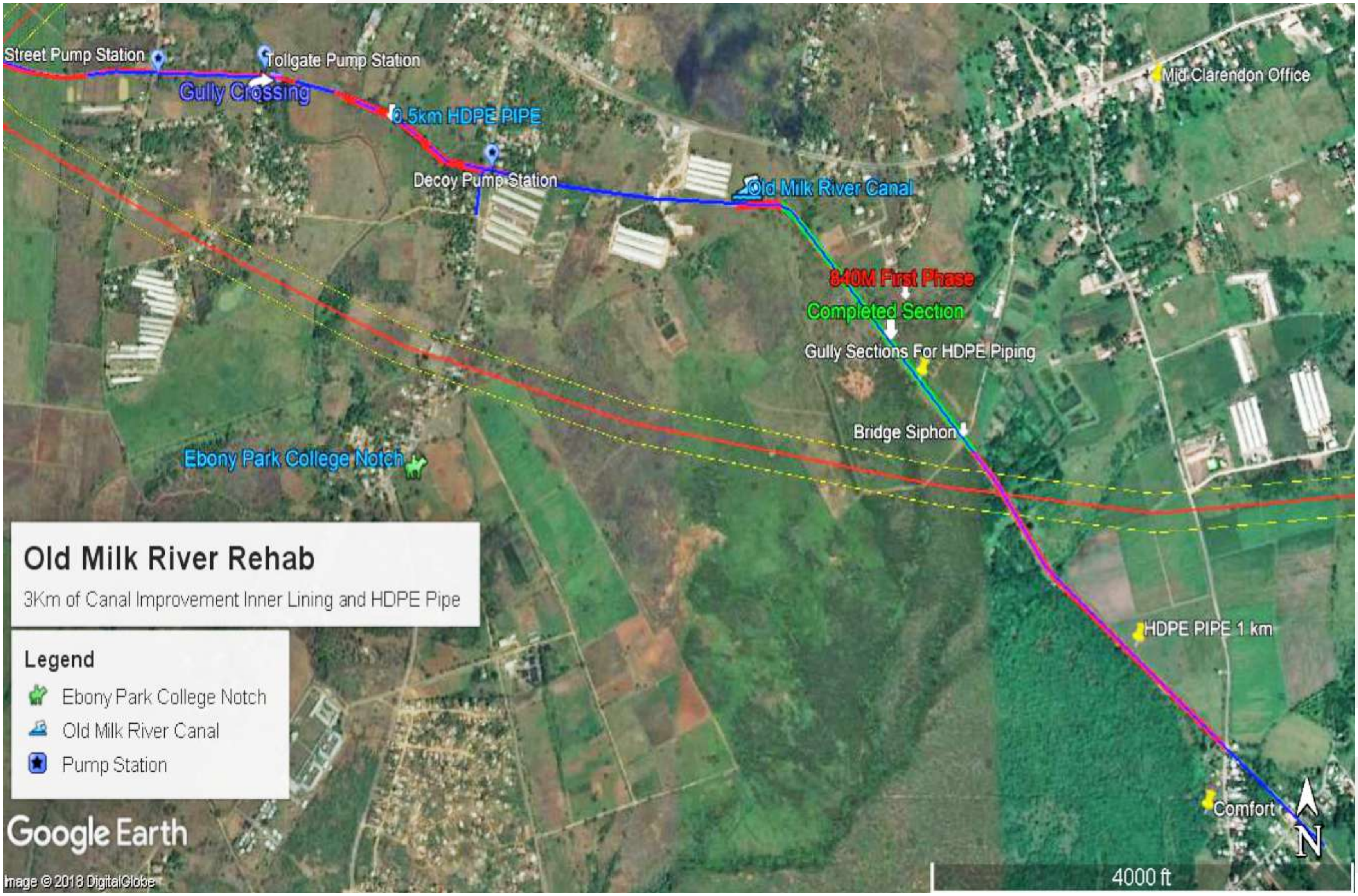


Figure #3: Google map showing the areas in Clarendon where canal rehabilitation works were done

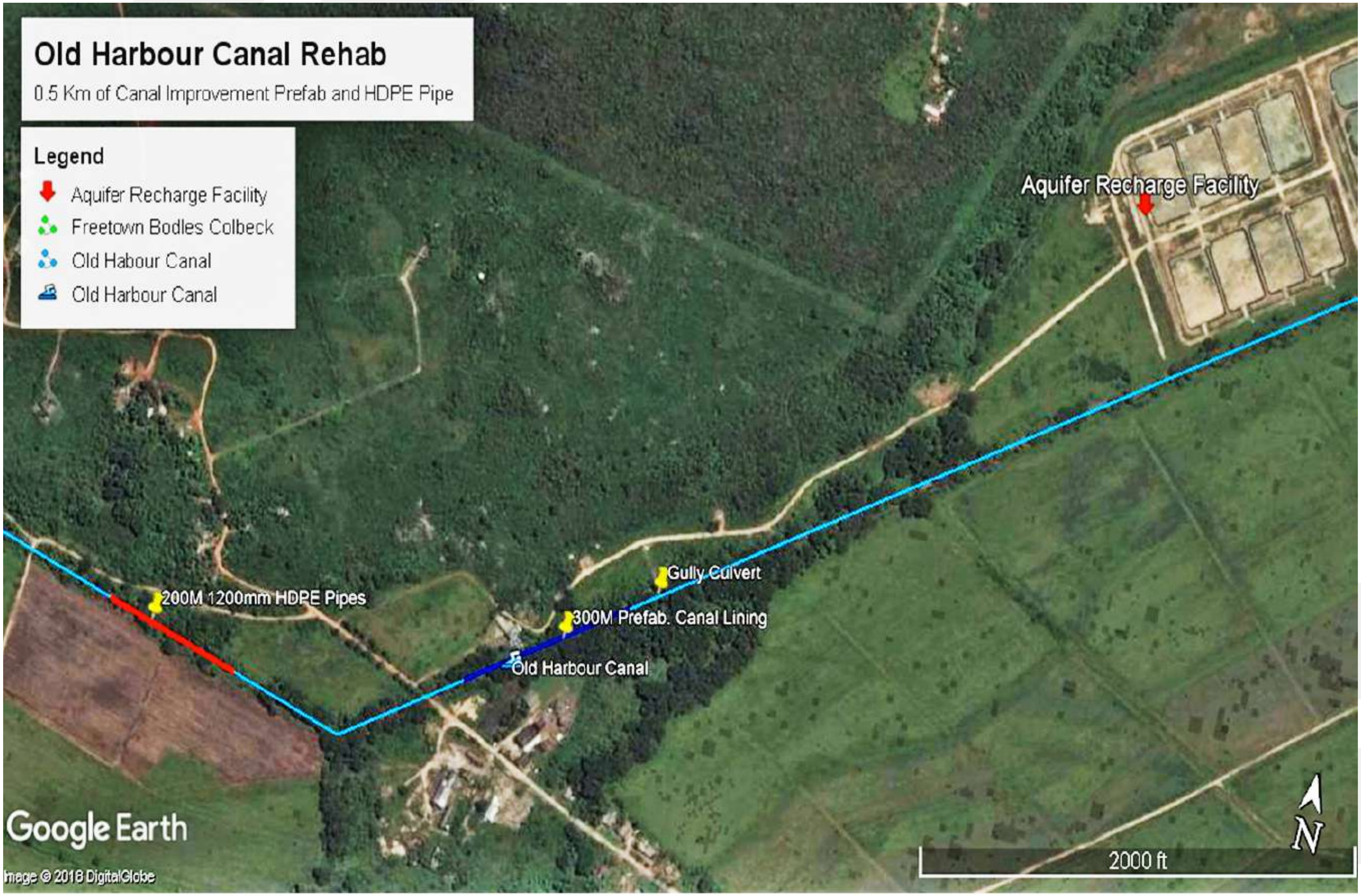


Figure #4: Google map showing section of canal in St. Catherine where rehabilitation works was done

ELECTRICAL AND MECHANICAL UNIT

Electrical/Mechanical Maintenance

The Electrical/Mechanical Unit continues to be engaged in installation, repairs and maintenance of NIC assets including pumping units, equipment and office buildings. Team members from the unit were engaged in activities to improve the efficiency of pumping units, conveyance infrastructure, distribution and measuring devices. The team members continue to respond to breakdown within a 24 hours' time period with the aim of resolving the issues immediately where possible or shortly thereafter. The team continues to effect repairs and carryout general servicing to heavy equipment such as; backhoes, excavator, dragline and trucks, in addition to, portable equipment such as: pumps and generators.

Preventative Maintenance Programme

The continuous execution of a scheduled Preventative Maintenance (PM) Programme has proven to be a critical tool in managing the NIC's asset pumping equipment portfolio. The assets in the portfolio consist of pumps, motors and motor control centres (MCCs). A quarterly preventative maintenance programme, consisting of four (4) separate cycles, was vigorously pursued during the year 2017/2018. The NIC has successfully completed the four cycles during the period resulting in reduce downtime of the pumping equipment. The Commission utilises both internal staff and external contractors to carryout PM works as outlined in the **Table 2** below.

Table #2: Preventative maintenance schedule 2017/2018

Preventative Maintenance	Q1	Q2	Q3	Q4	Cycle	Persons Engaged	Completed
	Eastern						
Electrical	X	X	X	X	4	NIC Staff	100%
Mechanical	X	X	X	X	4	NIC Staff	100%
	Central						
Electrical	X	X	X	X	4	NIC Staff Personnel	100%
Mechanical	X	X	X	X	4	External Contractor	100%
	Western						
Electrical	X	X	X	X	4	External Contractor	100%
Mechanical	X	X	X	X	4	External Contractor	100%
Key	X	Service cycle completed					
	0	Service cycle not done					

Pump and Motor Maintenance

In order to sustain customer service, continuous operation, and reduce downtime of the NIC's pumping units, motors and pumps are imperative. During the 2017/2018 financial year, a total of five (5) motors and six (6) pumps were removed for general servicing and repairs. An initiative to improve the efficiency of the pumping equipment was deliberately pursued, which resulted in the procurement of ten motors, which included six (6) vertical hollow shaft (VHS) premium efficiency motors, 2 vertical solid shaft (VSS) premium efficiency motors, and two (2) submersible motors, three (3) variable frequency drives (VFD's) and one (1) pump turbine and one (1) complete pump set (motor, turbine, discharge head, columns and fittings). This restorative maintenance programme was necessary to replace ageing and inefficient equipment, reduce downtime and improve both operation and production efficiencies. To date, four (4) motors have been replaced and one new turbine installed, the installation of these equipment has resulted in increased water production and reduced energy consumption. See **Table 3** below.

Table #3: Outlines the pumping equipment procured, intended location, and the impact of the installations.

Region	Location	Scope of work	Funding	Impact
Central	Parnassus	Replacement of motor	GOJ Capital A	Improved operational efficiency
	Rhymesbury Relift	Replacement of motor	GOJ Capital A	Improved operational efficiency
	New Forest	Replacement of motor	GOJ Capital A	Reduced downtime
	Gravel Hill	Install VFD	GOJ Capital A	Improved operational efficiency
	Upper Rhymesbury deep well	Install VFD	GOJ Capital A	Improved operational efficiency
	Ebony Park #1	Install VFD	GOJ Capital A	Improved operational efficiency
Western	Little Park F3	Replacement of motor	GOJ Capital A	Reduced downtime
Eastern	Bodles #2	Replacement of Turbine	GOJ Capital A	Improved operational efficiency

Figure#5: Replacement motors to be installed to enhance operational efficiency

Figure#6: Replacement Pump Set before installation

Figure#7: New efficient moter installed

Figure#8: Standby generator installed at Cookson #4 pumping station

A standby generator was installed and commissioned into service at the Cookson #4 Pump Station during the period being reported. The installation and satisfactory operation of this generator provides redundancy to the supply of water to the customers during failure in the public electricity supply. The unit operates automatically allowing NIC provide reliable quality service to the connected customers.

Rehabilitation of Pumps

During the period under review, three (3) pumping units were rehabilitated; Milk River Relift in the Central region, Cow Park A and Phillipsfield in the Eastern region. These interventions resulted in increased water production, increased operational efficiency and reduced energy consumption; by 62% energy consumption and 55% increase in water production at the Phillipsfield station.

Workshop Performance

During the 2017/2018 financial year, the Workshop continued to provide support services to the Civil, Electrical/Mechanical and Operations Departments. The services provided by the Workshop were to both maintain and improve the Commission's irrigation infrastructures, and equipment. Works carried out by the Workshop included:

(i) Fabrication of items to facilitate customer's connection and maintain reliable service.

(ii) Repairs to the irrigation pipe network throughout the NIC irrigation districts.

(iii) Fabrication and welding services on the Monymusk Estate Irrigation infrastructure.

Overall, the Workshop performed credible throughout the year as it relates to fabrication of items and welding duties. The schedule of items fabricated and delivered by the NIC's Workshop during 2017/2018 Financial Year is outlined below in **Table 3** below.

Table#4: Fabrication listing produced at the Workshop

Description of Item	Quantity
Parshall Flume - 3"	16
Parshall Flume - 6"	24
Parshall Flume - 12"	3
Sluice Gate - 6"	54
Sluice Gate - 12"	24
Saddle	46
Risers & Nipples	224
Flange Adaptor	20

Energy Management

The general objectives of the Energy Management Unit include:

- developing and implementing strategies to increase efficiencies and reduce the NIC's energy demand
- implementing systems and procedures to minimise energy consumption and associated costs for buildings and irrigation infrastructure
- evaluating and implementing alternative energy solutions for electricity generation to offset the NIC's dependence on the JPSCo
- monitoring existing retrofits to ensure maximum energy and cost reduction possible
- reviewing JPSCo billing to confirm accuracy of monthly billing charges.

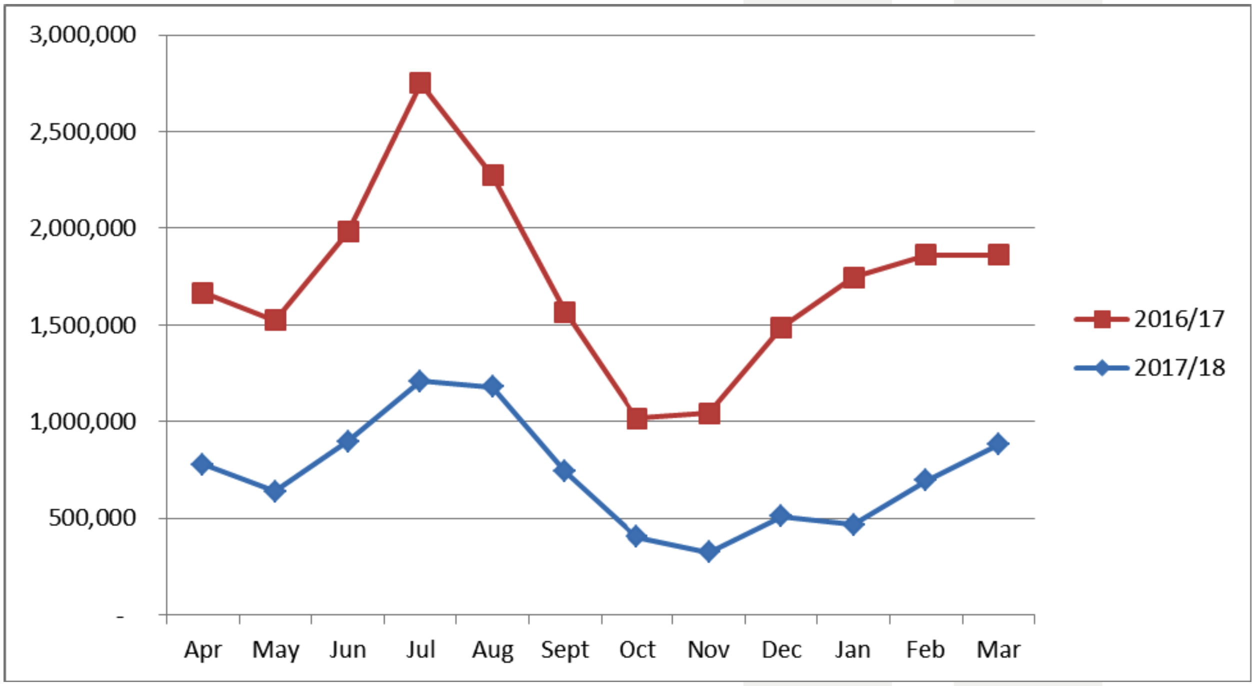
Energy Usage, Trends and Energy Avoided

For pumping operation, the NIC consumed 8.75 GWh of energy. This is 27% lower than the previous year due to lower demand for irrigation water resulting from extended rainfall. The energy cost for water production was 11.5% lower than last year at $325.6M and 30% lower than the projected cost of $467.2M as a result of reduced pumping hours due to significant rainfall. The average cost for energy from JPSCo increased by 14.3% from $29.93/kWh in April 2017 to $34.22/kWh in March 2018 with an average cost of $30.34/kWh for the 12-month period.

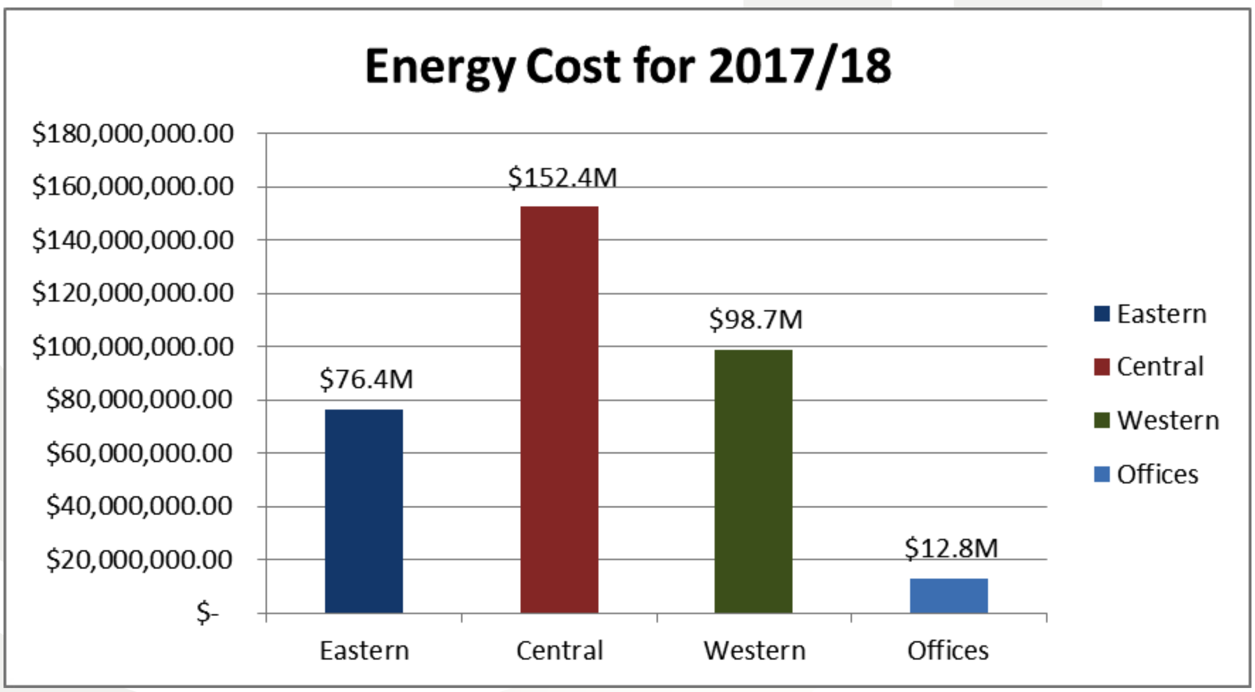
Table #5: Showing Energy Consumption and Cost for the past 4 Financial Years

Period	Energy Consumption (GWh)	Pump Energy Cost ($)
2014/15	12.54	484.0M
2015/16	16.68	492.3M
2016/17	12.03	368.2M
2017/18	8.75	325.6M

Graph#1: Showing Monthly kWh Consumption for 2017/18 compared to 2016/17

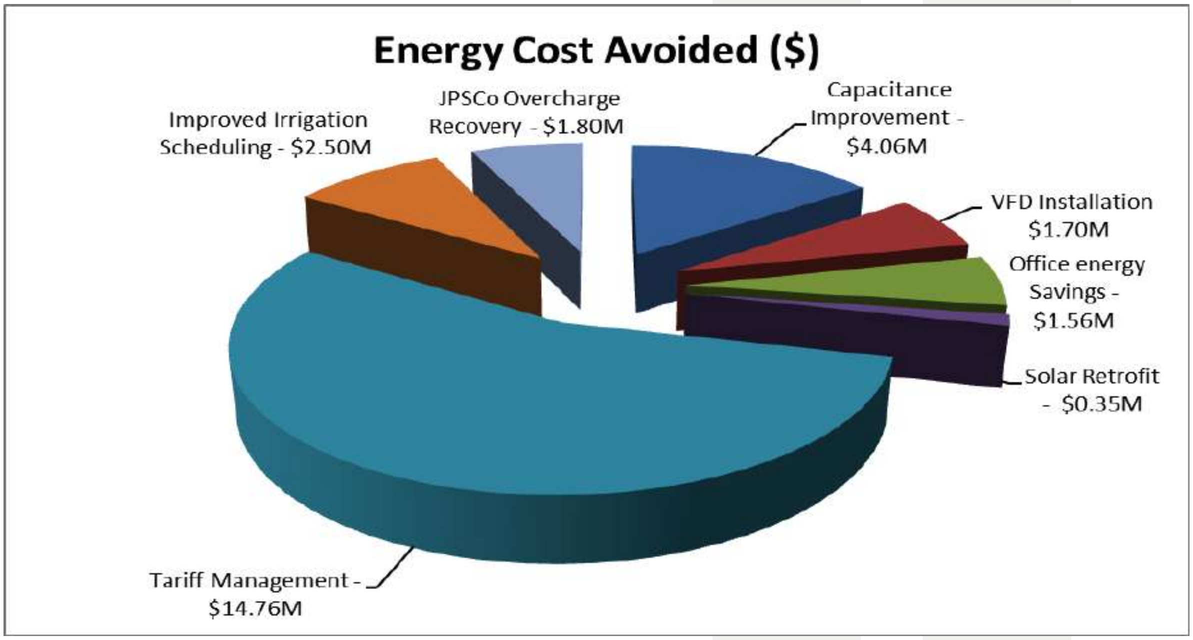


Graph#2: Showing Energy cost split for Regions and Offices



Through its energy management programme, the NIC avoided the use of 271,000 kWh and 3,100 kVA without compromising water production, delivery or staff comfort levels. The programme yielded cost avoidance of $26.7M or 7.90% of the total energy cost from seven (7) energy saving initiatives.

Graph#3: Showing Energy Cost Avoided through seven (7) initiatives



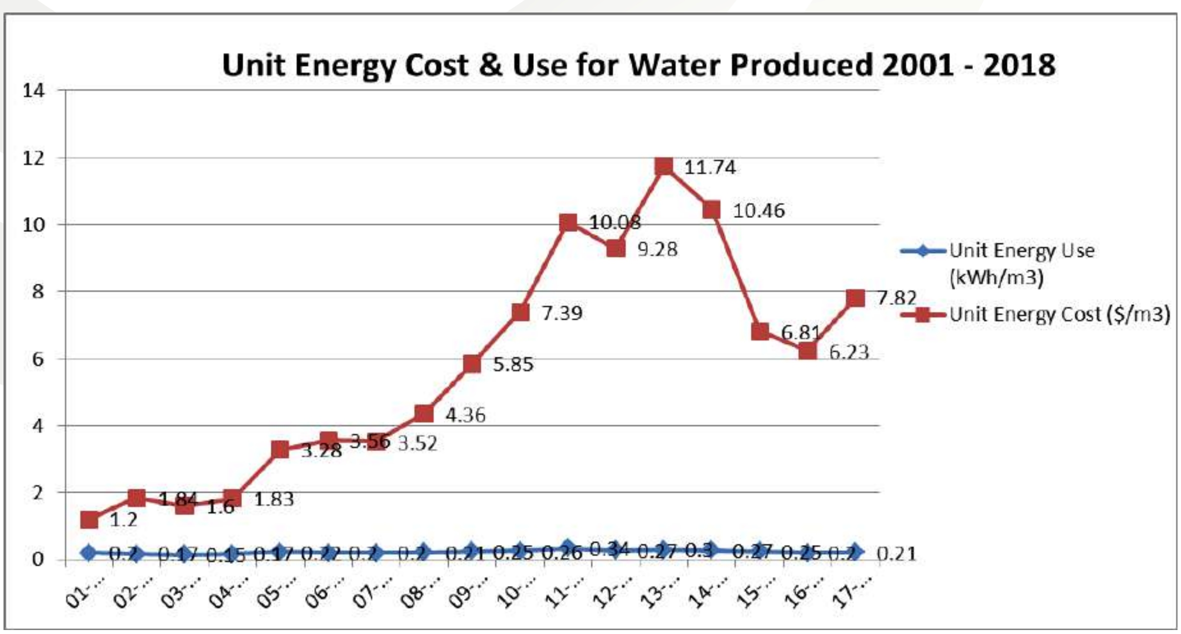
Unit Energy Cost & Unit Energy Use for Water Production

The unit energy use achieved was 0.21 kWh/m3 or 5% higher than the target of 0.20 kWh/m3 , while the unit energy cost for water production of $7.82/m3 which was 71% higher than the target of $4.57/m3 due to a number of factors including:

- lower water production from pumps utilizing a JPSCo Rate 40 tariff due to extended rainfall
- high energy requirements and low efficiency motors for water pumping
- very little self-generation of energy from solar photovoltaic (PV) systems at pump stations.

These factors are being addressed through procurement of premium efficiency motors to replace inefficient ones, temporary disconnection of some Rate 40 JPSCo accounts with no water demand and the roll out of a programme to retrofit pump stations with solar photovoltaic systems.

Graph#4: Showing Unit Energy Cost & Use for Water Produced from 2001 to 2018



Activities for the Energy Unit during 2017/2018.

Target	Achievement	Variance	Variance as a %	Analysis	Recommendation for FY 2018/19
Energy cost avoidance: **10%**	7.90%	-2.10%	-21%	- 4 of 6 VFDs received through project with PCJ were out-of-commission. - Power factor correction project behind schedule due to delays with suppliers. - Increase in office base loads due to addition of new offices, staff and equipment.	- Repair, reprogramm and commission 4 VFDs to reduce energy demand and associated cost - Fast-track installation of capacitor banks under power factor correction project - Reestablish new base loads at offices; replace inefficient equipment with special attention paid to A/C units.
Unit energy cost for water production: **$4.57/m3**	$7.82/m3	-$3.25	-71.12%	- Lower than expected water demand due to extended rainfall led to shorter runtime of Rate 40 pumps leading to demand (energy) charges without pump operation. - Minute self-generation from solar plants - Need for more energy -saving retrofits including solar installations	- In consultation with Regional Systems Managers RSMs and Security Team, temporarily disconnect Rate 40 pumps that will not be operated for periods over 3 months. - Implement more solar retrofits to self-generate and consume energy - Implement power factor correction project carried over from FY 2017/18.
Unit energy use for water production: **0.20 kWh/m3**	0.21 kWh/m3	-0.01 kWh/m3	-5%	- Need to install more efficient motors, control systems, implement irrigation scheduling to reduce run time	- Recommend more VFD installations, motor replacement with premium efficiency units, continue conveyance improvements.

Capital Funded Projects

Power Factor Correction at 9 Pump Stations

A bidder was contracted to execute the above project. Due to delays in shipment, the units will be installed in the 2018/19 financial year. This project is expected to save the NIC over $3.80M per annum in demand charges from the JPSCo with a simple payback period of 1.87 years.

Solar Retrofit of the Bengal Pump Station

The Engineering team is in the process of completing technical evaluation of the bids received to select a supplier for project execution. The project is expected offset 75% of the energy requirement for water production and reduces JPSCo energy costs for the station by $2.20M per annum.

Optimizing Irrigation Water Management to Improve Crop Output and Water Quality Output (International Atomic Energy Agency (IAEA) Project)

Experimental research was completed in January 2018 for a 1/3 acre plot of onions at the NIC's Braco Research and Demonstration Plot. Due to high incidents of rains and some flooding, the data collected was considered insufficient. To ensure adequate data collection for the experiment, another crop of onions is to be planted later in the project.

The NIC completed two (2) water sample cycles in June 2017 and March 2018 and await major ion and stable isotope analyses from the IAEA's Expert Laboratory to guide the process for water quality improvement.

Completion of the Pilot Project for Supervisory Control and Data Acquisition (SCADA) System

As part of a pilot project, a supplier was engaged to provide a SCADA system for the New Forest & Duff House Pump Systems. The main outputs of the system are:

- Provision of a real-time power data log in soft and hard copy
- Instant alerts by e-mail or SMS text message for severe fluctuations in power supply from JPSCo
- Remote monitoring and control for VFD, motor, and pump system.

The pilot highlighted several advantages as well as issues and constraints of the system, which the NIC and the supplier have worked to resolve. With the completion of the pilot project, the NIC will move to install the system at an additional four (4) pump stations in the 2018/19. This initiative is in line with the NIC's move to improve its operations with the use of technology.

Procurement of 10kW system for the Ebony Park Pump Station

The NIC procured the 10kW solar photovoltaic system housed at the Ebony Park Pump Station, which was installed in August 2015 as a part of a pilot project. The system was procured at a cost 40% lower than market value through negotiation with the supplier. The system has performed optimally and has generated over 39,000 kWh of energy and avoided over Eight Hundred and Thirty Thousand Jamaican Dollars (J$830,000.00 JMD) in JPSCo energy cost for the station since its installation in August 2015.

Operations

The Operations Department is divided into three regions, Eastern, Central and Western. The Eastern and Central regions use a mixture of canal and pipe (pressurised) systems, while the Western region is exclusively pipe. The strategic goal for the NIC water accounted for (the ratio of production versus invoicing) is 70%. A total of 61% of the flows were produced from surface sources with the remaining 39% being supplied from ground (well) source.

Table #7: Production percentage by district

Regions	Production	Invoice
Eastern	60.60%	56.60%
Central	25.50%	25.60%
Western	13.90%	18%
Total	**100.00%**	**100.00%**

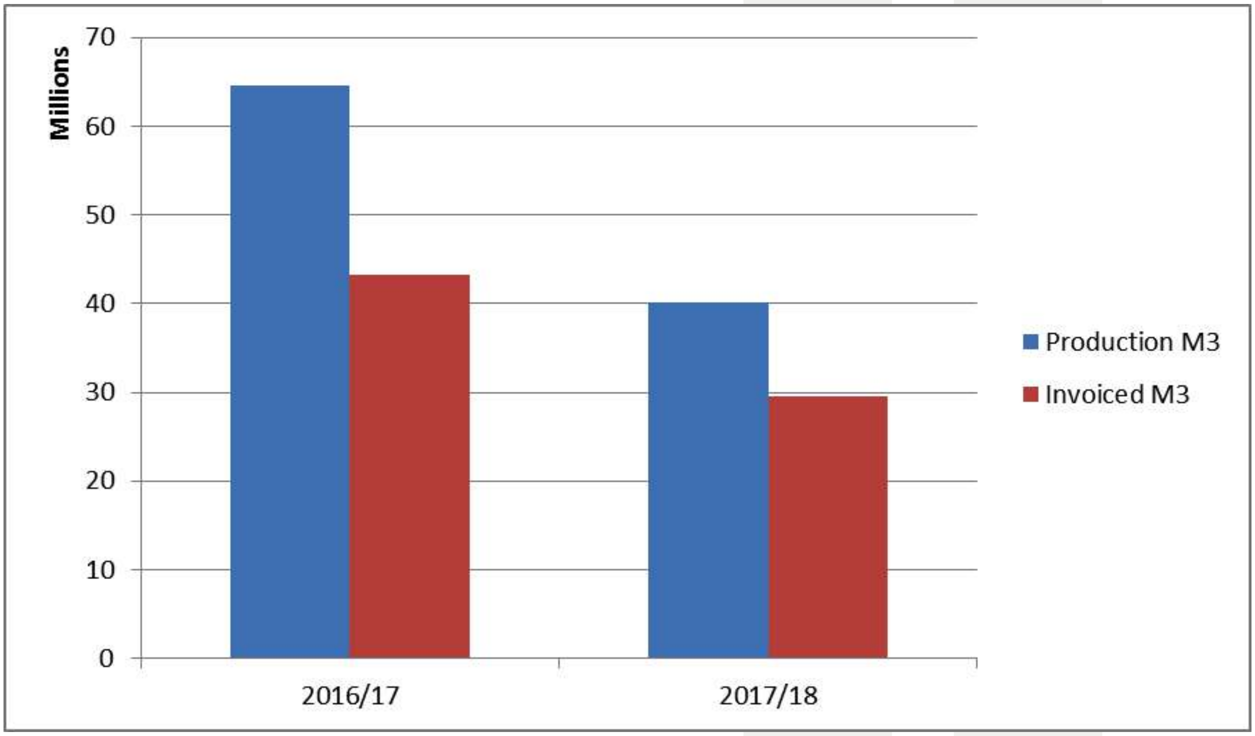
Water Production and Distribution

The overall contribution by regions to the production and distribution during the period under review is outlined in the Table #8 below. The department produced and distributed 40,515,984.00 million meters cube and 29,456,681.21 million meters cube of water respectively or 71.5% of production.

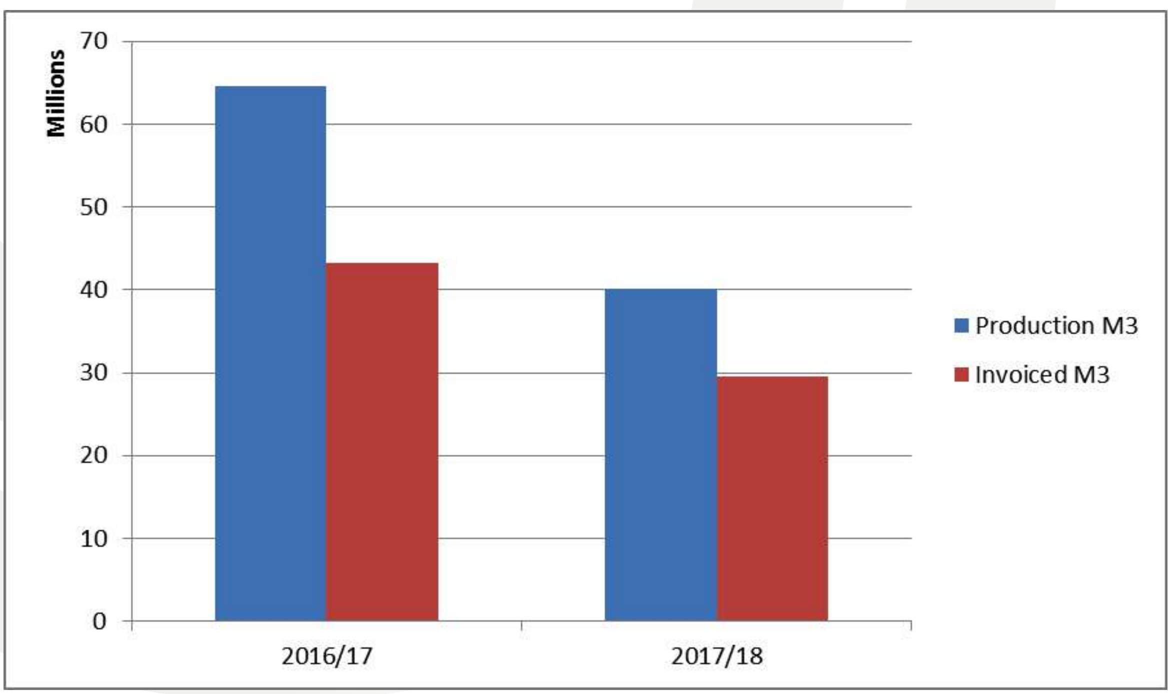
Water production decreased by 23,000,000 MMC or 36% during the year under review compared with prior year 2016/17. In contrast, invoicing levels went up from 67.1% in 2016/17 to 72.7% during 2017/18.

SUMMARY PRODUCTION VERSUS INVOICING BY DISTRICT APRIL 2017 - MARCH 2018

Location	Pump Hours	Produced (m3)	Invoiced (m3)	Prepayment	%Age Invoiced	Inv. Target (%)	Energy used (kWh)	JPSCo. Energy Cost ($)	Energy Cost ($/m3) Prod.	JPSCO Energy Cost ($/m3) Inv.	Kwh/m3 produced
Spring Village	9,862.53	1,702,616.75	1,252,331.55		73.6%	70%	41,184.94	1,857,024.22	1.09	1.48	0.02
Sandy Bay	1,960.98	518,251.69	393,192.36		75.9%	90%	199,248.80	7,463,829.84	14.40	18.98	0.38
Thetford	1,162.70	288,568.01	206,779.00	2,731.00	71.7%	90%	105,948.40	5,038,753.55	17.46	24.37	0.37
Bowers	1,334.52	162,109.93	113,248.70		69.9%	90%	47,482.00	2,194,933.02	13.54	19.38	0.29
Bodles #2											
Freetown #1	6,897.76	4,015,573.56	2,482,090.80		61.8%	90%	579,559.20	17,668,850.48	4.40	7.12	0.14
Grove Farm	0.00	0.00	0.00		0.0%		0.00	0.00	0.00	0.00	0.00
TOTAL (ST. DOROTHY)	**21,218.49**	**6,687,119.94**	**4,447,642.41**		**66.5%**		**973,423.34**	**34,223,391.11**	**5.12**	**7.69**	**0.15**
Colbeck	968.92	179,884.66	156,894.10		87.2%	90%	66,944.00	3,358,408.29	18.67	21.41	0.37
Blocks A & E, Bernard Lodge	15,262.50	2,664,807.00	2,130,270.20		79.9%	90%	660,330.24	21,090,501.67	7.91	9.90	0.25
Blocks B & C-Bernard Lodge	7,134.00	707,669.00	582,055.10	12,714.00	82.2%	90%	386,657.59	6,105,325.21	8.63	10.49	0.55
TOTAL (BLOCKS)	**22,396.50**	**3,372,476.00**	**2,712,325.30**		**80.4%**		**1,046,987.83**	**27,195,826.88**	**8.06**	**10.03**	**0.31**
Amity Hall	1,091.00	143,230.00	80,077.00		55.9%	90%	47,358.90	2,064,872.79	14.42	25.79	0.33
Plantain Garden River	90.00	6,970.00	5,005.00		71.8%	90%	0.00	0.00	0.00	0.00	0.00
Phillipsfield/Heartease/Norris	2,390.00	525,470.00	414,460.40		78.9%	90%	195,713.65	9,294,769.46	17.69	22.43	0.37
Rio Cobre Open Canal	0.00	14,515,397.64	8,906,591.66		61.4%	70%	0.00	0.00	0.00	0.00	0.00
TOTAL (EASTERN REGION)	**48,154.91**	**25,430,548.24**	**16,642,918.87**		65.4%	**70%**	**2,330,427.72**	**76,137,268.53**	**2.99**	**4.57**	**0.09**
New Forest/Duff House	4,940.70	1,304,553.50	1,101,387.00	111,666.00	84.4%	90%	1,025,223.20	39,149,076.81	30.01	35.55	0.79
Spring Plain/St. Jago/Ebony Park Deep Well/Jungle West/Harmons Well	4,884.62	1,871,163.31	1,447,865.88		77.4%	90%	494,697.08	22,970,526.18	12.28	15.87	0.26
Vernamfield	2,049.97	999,292.42	939,610.00		94.0%	90%	391,001.60	12,765,709.17	12.77		
Mid Clarendon Pumps	12,847.07	5,056,951.53				70%	1,889,795.15	76,235,362.44	15.08	18.70	0.37
Mid -Clarendon River	0.00	3,276,814.45	4,075,854.16		80.6%						
Mid-Clarendon (Old Milk River)	0.00	442,136.34									
SUB-TOTAL (canal system less washout)		2,185,781.15									
TOTAL (CENTRAL REGION)	**24,722.36**	**9,231,960.76**	**7,564,717.04**		81.9%	**70%**	**3,800,717.03**	**151,120,674.60**	**16.37**	**19.98**	**0.41**
Hounslow	4,298.50	2,534,104.00	2,411,909.60	12,356.22	95.2%	90%	939,176.40	40,140,130.46	15.84	16.64	0.37
Beacon/Little Park	10,334.57	2,762,033.00	2,307,450.00	270.00	83.5%	90%	1,767,504.40	52,766,072.68	19.10	22.87	0.64
Braco	2,352.48	513,447.00	486,465.70	1,130.60	94.7%	90%	158,440.80	5,743,866.84	11.19	11.81	0.31
Seven Rivers	0.00	43,891.00	43,220.00		98.5%		0.00	0.00		0.00	0.00
TOTAL (WESTERN REGION)	**16,985.55**	**5,853,475.00**	**5,249,045.30**		89.7%	**90%**	**2,865,121.60**	**98,650,069.98**	**16.85**	**18.79**	0.49
OVERALL	**89,862.82**	**40,515,984.00**	**29,456,681.21**		**72.7%**	**70%**	**8,996,266.35**	**325,908,013.11**	8.04	11.06	0.22



Graph #5: Comparing production and invoice in financial year 2016/17 and 2017/18



Graph #6: Monthly water productions being compared with previous financial year

During the year the Operations Department focused on ensuring flow delivery to consumers as well as improved water monitoring for accuracy and scheduling to reduce unaccounted for water, bulk flow meters were operational at all except three (3) production stations.

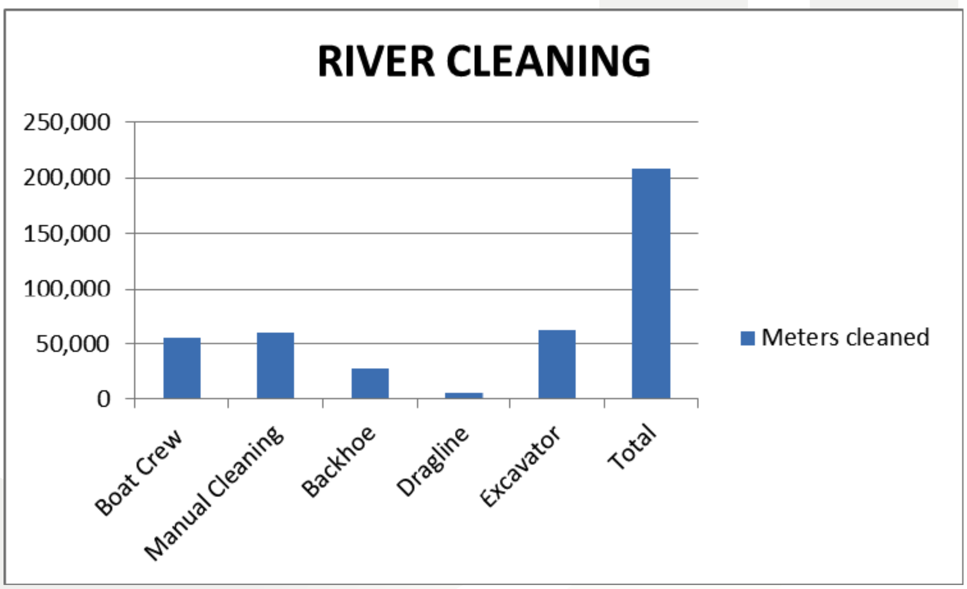
The highest and lowest production took place in August and November of the 2017/18 financial year 6,296,653 m3 and 1,522,436 respectively in comparison to highest in January 2017 8,642,775 and lowest October 2016 3,491,737 of the 2016/17 Financial year.

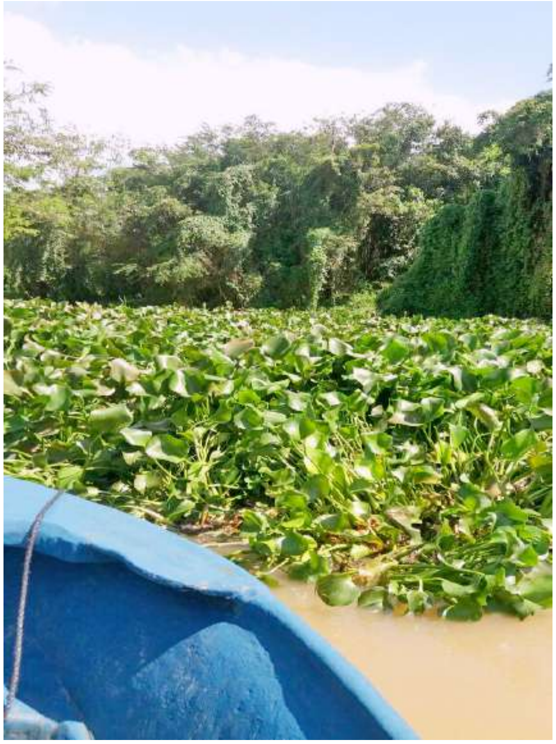
Drain Maintenance

The NIC is responsible for maintaining a schedule of waterways in the Upper and Lower Morass regions of St. Elizabeth. For the period under review, a total of 208 km of drains and water ways were cleaned. In addition, the NIC responded to requests from the other state agency for assistance with drain maintenance of 4.6km in the Amity Hall and Ebony Park Agro-Parks.

The work accomplishment was achieved despite frequent downtime by the excavator, backhoe and dragline. The dragline has done its useful life and a replacement is being proposed in the upcoming budget. The Commission procured a new backhoe and leased one, which has improved the reliability and efficiency of the equipment. Another factor limiting the amount of work that was done were frequent rains and the availability of sufficient funds especially for manual cleaning.

Graph #7: Showing distribution of methods use in waterways cleaning and the distance cleaned





Figure#9: View from boat showing water hyacinth choking waterway

Figure#10: After cleaning activity waterway clear of grass and water hyacinth

There is an agricultural tractor that is assigned to the Hounslow district that is used to provide land preparation services to the farmers a total of 60.9 hectare were completed for the year.

Security

The Security Unit worked tirelessly in fulfilling its mandate of reducing security risks to staff and property. This was done through careful implementation, monitoring and constant review of security measures.
Given the nature of the service, the Unit faced many challenges; it employed varying strategies to manage the many security risks, which occurred from time to time. Every opportunity was used to promote the message among staff that 'security is everybody's business and that they should report what they see'.

A total of 53 cases were processed during the period that included 20 new cases the others were brought forward from the 2016/17 financial year.

The cases were divided into internal and external, if the outcome is dependent on NIC's internal resources or decisions then it was so classified or if the outcome was in the courts or being investigated by the police it was categorized as external. The main security violations were illegal abstraction of water, tampering with the Commission's infrastructure, vandalism, squatting, encroachment, and simple larceny.

Mid-Clarendon area accounted for 41.3% of the total offences detected compared to 45.5% in the last financial year. Squatting and encroachment were the main breaches attributable to the St. Catherine. Notices of removal were served on sixty 60 squatters residing on the canal reservations in the St. Catherine area.

The Commission continue to experience vandalism of the property particularly pumping stations; this was more pronounced in the Monymusk area. However, we saw hydrants and meters also being damaged and/or stolen mainly in the St. Catherine and Mid-Clarendon areas.

Consequent on staff reports and observations the security conducted operations where water was being stolen, the established process was used to sanction the violators and a sum of $253,050 was recovered for water loss.

Demonstration Plots

There are two demonstration plots one in Hounslow and the other in Braco two (2) hectares and one point two (1.2) hectares, respectively. The aim of maintaining these plots are to:

- Teach agricultural techniques
- Introduce new technologies
- Experiment
- Share ideas about effective and efficient agricultural practices to boost yield
- Test new methods side by side with traditional methods
- A practical exhibition for the NIC customers and potential customers

During the year 2017-2018, Watermelon, Cantaloupe, Scotch Bonnet Pepper, Cabbage, Irish Potato and Onion were cultivated at the Demonstration Plots. There were varying successes with the Irish Potato and onion crops in Hounslow. The onion was severely impacted by the persistent rains that we received particularly close to harvesting. The Irish Potato on the other hand did well.

Figure#11: cabbage at the Braco Trelawny demonstration plot

Figure#12: Harvested Irish potatoes at the Hounslow St. Elizabeth demonstration plot

The NIC collaborated with other state agencies and input suppliers to plant 0.4 hectare of land with Irish potato. Training was conducted in best practices in land preparation, fertilizer application, planting techniques, identifying stress, fungal, bacterial, pest related problems, plant care and steps that should be taken before, during cultivation and postharvest. The training was conducted in three sessions.

Monymusk

The operations at Monymusk irrigation scheme was in a state of readiness with 14 pumping facilities operated to deliver water to the customers. This was however impacted by the unusually high rainy conditions that persisted for approximately seven months of the reporting year. The small team was able to coordinate the following activities:

- Installation of customers measuring devices and control gates, which ensured the accurate measurement of water delivered to the customers.
- Refurbishing of pumping unit.
- Water distribution channel maintenance and repairs.

Figure#13: Sluice gate and parshall flume (measuring device foreground) at customer service point

Figure #14: Thieves gutted a motor control centre.

The operations experienced some significant setbacks which saw theft and vandalism occurring at no fewer than seven pumping stations and customer measuring devices valued at approximately $2,500.000.00. There are many things that could have impacted the overall performance of the scheme these include absence of measuring devices at the pumping stations, derelict conveyance systems, and old and in many cases out dated pumping and electrical equipment.

Commercial Operations Division

The corporate objectives of the Commercial Operations Division are:

- To expand the customer base and increase service area under irrigation.
- To increase revenues earned, generate income from additional revenue streams, optimise collections of revenue and ensure customer satisfaction.

Water Sales and Drainage

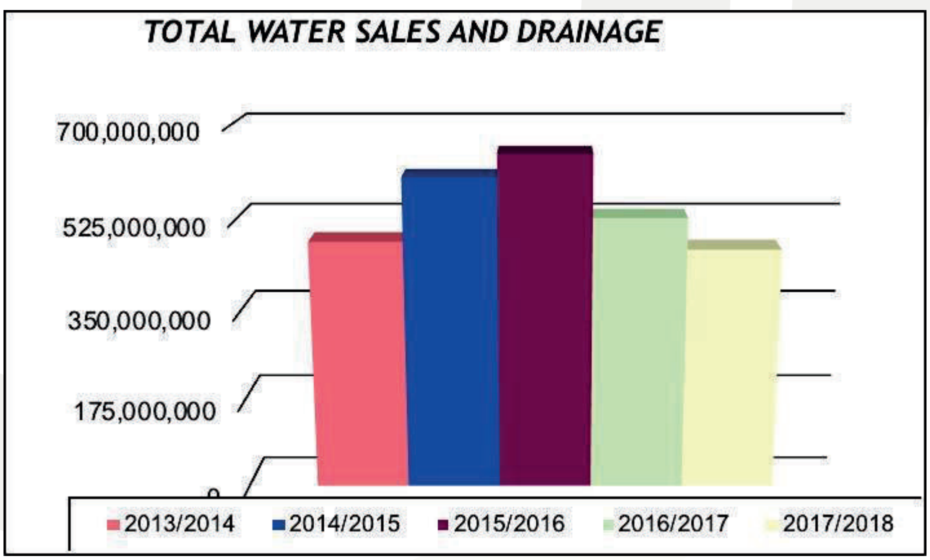
Water sales and drainage charges for the financial year amounted to $477,487,014. Revenue from new customers accounted for approximately $2,332,437.12 of this amount. During the period, the total volume of water invoiced amounted to 29.4 million cubic metres.

Water sales and volume amount invoiced were significantly impacted by excessive levels of rainfall as well as the continued decline in sugar cane production resulting in lower demand for irrigation services.

The Commission exceeded its collections target of $460.80 million by 0.90 per cent or $4.1 million.

Mindful of the economic challenges facing our customers, the NIC continues to partner with customers and utilises various strategies in order to optimise revenue collection.

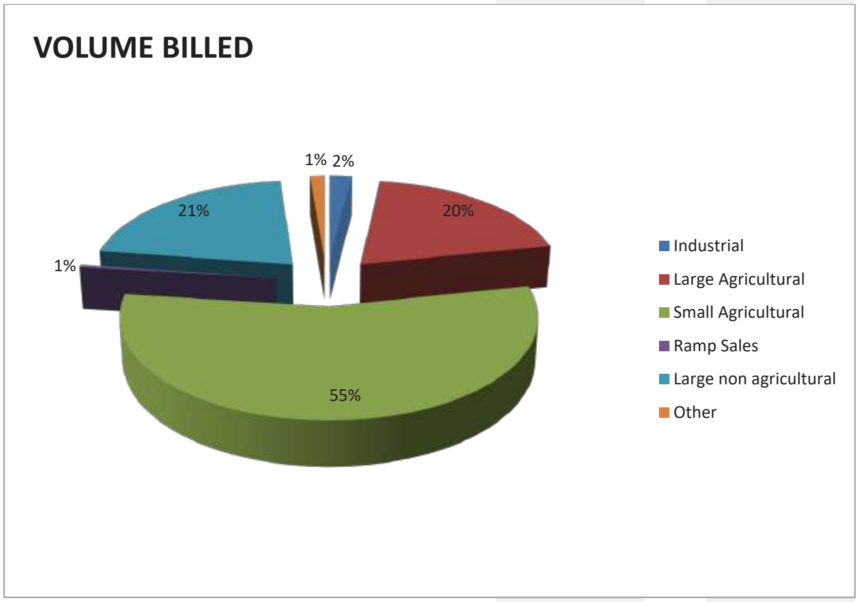
The Commission's levels of invoicing for the financial years 2013/2014 to 2017/2018 are outlined below.

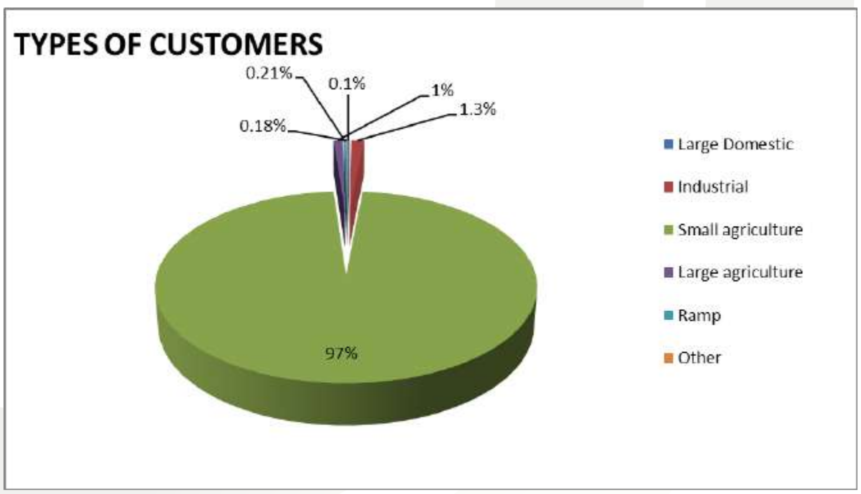


Customer Service

As part of its continued efforts to improve service levels and respond to the needs of our stakeholders, the NIC introduced more convenient payment options to facilitate our customers. Customers now have the opportunity to use debit cards via point of sale machines at most of the organisation's locations and through an outsourced collection agent.

The chart below depicts the distribution of irrigated lands among customers classified as active, suspended and terminated. Based on the total customer base of 4,389 occupying approximately 16,829.01 hectares of land, 62.9 per cent or 2,762 customers on 8,425.79 hectares were active while 1.5 per cent or 68 customers on 247.85 hectares were suspended and 35.5 per cent or 1,559 customers on 8,155.37 hectares were terminated. The number of active customers on irrigated lands decreased from 2,781 to 2,762 reflecting a 0.07 per cent decrease.





The chart above is reflective of the spread of NIC's customers. Large non-agricultural users accounted for 0.02 per cent of the active customer base and 21 per cent of the total volume billed, while industrial users accounted for 1.31 per cent of the active customer base and 2 per cent of the total volume billed.

Large agricultural users represented 0.09 per cent of the customers and 19.76 per cent of the total volume billed, while small agricultural users accounted for 97 per cent of customers and 55 per cent of volume billed.

Ramp sales accounted for 1 per cent of volume billed. Sugar accounted for 6 per cent of the customer base, while aquaculture accounted for 0.01 per cent. Other crops grown accounted for 92 per cent. Large customers accounted for 81.6 per cent of total revenue.

Newly Established Irrigation Scheme

The newly established irrigation schemes contribute to the growth in potential revenue for the organisation. The recently commissioned system at Amity Hall, St. Catherine is now fully operational with twenty-one customers actively engaged.

Customer Care

During the period, the NIC experienced a reduction in major customer complaints. The Commission continues to maintain improved service delivery and is committed to the highest standard of service.

Irrigation Water Applications

New applications for water were received and reviewed from the eastern, central and western regions as follows:

Eastern Region - 64 applications with a corresponding acreage of 192.16 hectares were received.

Western Region - 105 applications were approved for a total of 193.01 hectares.

Project Unit

During the year under review, NIC's Project Unit continued work on the development and implementation of four major projects started in the previous year. The status of these projects as at March 31, 2018 are summarised below.

Proj. No.	Project Title	Estimated Cost US$('000)	Funding Source to date	Status	Executing Partners
1.	Essex Valley Agricultural Development Project (EVADP)	41.70 (£35.612)	UK-CIF	Project Implementation in progress. To be completed by August 31, 2022	MEGJC, NIC, AIC
2.	South St. Catherine and Clarendon Agricultural Development Project (SCCADP)	20.00 (£17)	UK-CIF	Request for Expression of Interest for Consultancy Services for the preparation of a Feasibility Study and Detailed Design issued.	MEGJC, NIC, AIC
3.	Pedro Plains Agricultural Development Project (PPADP)	70.0	Fonds d'étude et d'Aide au Secteur Privé (FASEP)	Visit conducted by French firm SCP. Proposal for funding from FASEP submitted for approval by Govt. of France to conduct of a Feasibility & Design Study	MEGJC, NIC, AIC
4.	Update of the National Irrigation Development Plan (NIDP)	1.0	CDB	Methodology for the update being developed	MEGJC, NIC

Essex Valley Agricultural Development Project (EVADP)

The project is funded through a £35.515 million grant from the United Kingdom Caribbean Infrastructure Fund (UK-CIF) administered by the Caribbean Development Bank (CDB). The Government of Jamaica is contributing an additional £97,000 mainly for the provision of land. The implementation period is August 31, 2017 to August 31, 2018. The Ministry of Economic Growth and Job Creation (MEGJC) was designated as the implementing agency under the project. The NIC however has commenced project execution while awaiting the establishment of the Project Execution Unit.

The expected outcome of the project is enhanced production and productivity levels of farmers in Essex Valley by 50 per cent in a socially inclusive, gender equitable and climate sensitive manner. Approximately 718 hectares of land is to be impacted and it is expected to create 1,080 new jobs. The key components of the project designed to achieve the outcomes are as follows:

- Improved irrigation systems
- Enhanced agricultural production, marketing facilities and systems
- Energy efficiency/renewable energy

During the year, the Project Unit led the project implementation and the following key outputs were achieved:

- Approval of the Essex Valley Irrigation Order approved by Parliament in November 2017;
- Signing of Essex Valley Agriculture Development Project (EVADP) grant agreement by the Honourable Minister of Finance on July 20, 2017;
- Establishment of required Project Steering Committee and the Technical Advisory Group;
- Cabinet approval for acquisition of 11 parcels required for the implementation of wells, administrative offices, solar farm and packing house;
- Cabinet approval of the required cadastral survey contract valued at J$99,563,000 to be executed over a nine month period;
- Construction of the project office at the NIC. This will house project personnel to facilitate smooth execution; and
- Recruitment of three of the five EVADP core project personnel to include the Project Manager and Lead Consultant Civil Engineering.

The EVADP Project Unit was therefore made operational during November 2018 and continued implementation of the project. Going forward, this unit will be fully staffed and tasked to implement the project to August 2022. The priority activities to be completed during the upcoming financial year include:

- Completion of the baseline survey to establish the pre-project status in Essex Valley.
- Final siting and drilling of the production wells.
- Procurement of key consultancies including social/gender intervention, engineering services and climate vulnerability assessment.

South St. Catherine and Clarendon Agricultural Development Project (SCCADP)

This project seeks to stimulate economic growth in areas such as Southern St. Catherine and Clarendon by utilising fallow lands that have traditionally been under sugar cane production.

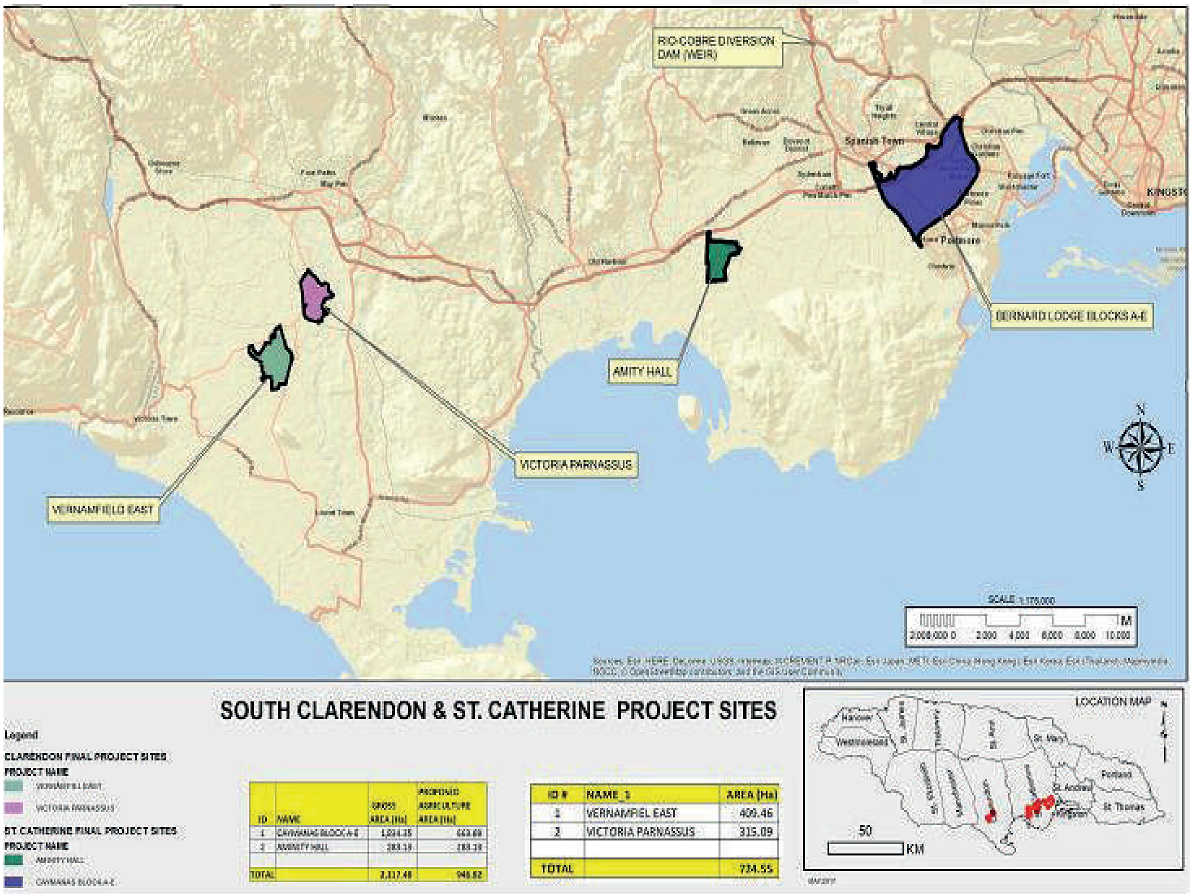
Funding has been identified as the remainder of the UK-CIF Fund administered by the Caribbean Development Bank, after provision for EVADP and comprising approximately £17 million and includes the conducting of a feasibility and design study. Significantly during the year, the NIC received technical assistance from the Food and Agriculture Organisation to assess the proposed project scope and finalise a scoping report. As a result of this work, the CDB has accepted the recommendation to develop irrigated agriculture production on four parcels of land totalling approximately 1,600 hectares in South Clarendon and St. Catherine.

It is envisaged that the agricultural development model will include the implementation of an Agricultural Economic Zone. This will comprise rehabilitation of existing irrigation systems along with the provision production and marketing facilities in order to increase the overall productivity and incomes of farmers, and alleviate poverty within the beneficiary communities.

The following was achieved during the 2017/18 financial year:

- Identification of four sites for the project area comprising the Bernard Lodge Blocks and Amity Hall in St. Catherine and lands at Parnassus and Vernamfield East in Clarendon;
- Scoping of the project feasibility terms of reference by the Food and Agriculture Organisation; Project implementation to be completed by August 2022;

It is expected that by December 2018 the feasibility study will be completed and approval obtained for the funding of the project by the UK-CIF and CDB.



Proposed Areas for SCCADP

Pedro Plains Irrigation Expansion

The proposed project seeks to expand high-valued irrigated agriculture in Pedro Plains by supplementing the existing ground water sources with surface flows from the Black River.

Currently the available groundwater flows are inadequate to satisfy the projected irrigation needs along with the growing tourism development and domestic demand in the area. The Government of Jamaica through the NIC has approached the French Government to develop a feasibility study and preliminary design for the proposed scheme expansion.

Funding for the feasibility study and preliminary design which is estimated at €692,540 (Euros) is to be provided through grant funds from FASEP (Fonds d'étude et d'Aide au Secteur Privé) a French Aid Fund designed to benefit developing countries with French industrial know how and engineering.

When implemented, the project will impact an additional 1,450 hectares of irrigable lands in areas including Flagaman, Southfield, Brucefield, Mountainside, Newell and Treasure Beach in St. Eizabeth.

The following was achieved for the 2017/18 financial year:

- Identification of the source of funds and a company to conduct the feasibility and design study in keeping with the terms and conditions of the funding agency. The firm French Sociele du Provence (SCP) has been designated to undertake the study.

- Finalisation of the terms of reference for the feasibility study and preliminary designs has been accepted by GOJ, FASEP and the Sociele du Provence (SCP).

It is expected that the feasibility and design study will commence during the next fiscal year and should be conducted over a 12 month period.

National Irrigation Development Plan

The project concept for the update of the National Irrigation Development Plan (NIDP), was presented to the Public Investment Management Secretariat and approval was obtained in July 2017. In addition, the CDB has included it in their Country Strategy Paper for Jamaica for the period 2017-2021.

It is expected that the review of the NIDP Master Plan will commence in the next fiscal year and seek to add new areas for the expansion of irrigation based on the Vision 2030 Plan; in keeping with the projected growth in the agricultural sector.

Management Information Systems Unit

The corporate objective of the Management Information Systems Unit is to use information and communication technology to enable improvements in NIC's business processes and provide support services to achieve corporate goals.

Some of the Division's initiatives over the period included:

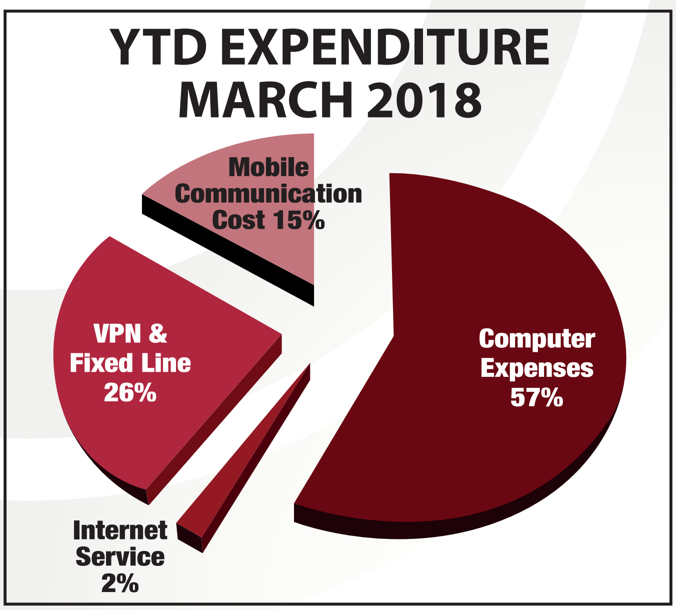
- New server infrastructure in a virtual environment to upgrade domain for user support, document management and security;
- Use of network routers to improve speed and security;
- Upgrade of Microsoft SQL server and Microsoft dynamics suite;
- Deployment of the infrastructure to host corporate digital library to improve documents management and access; and
- Phase 1 and 2 of In-house hosted Voice Over Internet Protocol PBX system activities.

Plan	Achievement	Benefit
Server Infrastructure	Acquisition and deployment of two high performance servers and two high capacity NAS (Network storage) Acquisition and deployment of four routers	Virtualisation of five major server support service Improved network management Increased capacity for file storage and management
Network Infrastructure	Acquisition and deployment of four routers	Network performance and security
Application Upgrade	Upgrade of SQL Server to 2014 Upgrade of Microsoft Dynamics GP to 2016 Upgrade Microsoft SharePoint to 2016 Upgrade of Payroll System to MCS BizPay	Improved efficiency Web access to Dynamics GP Smooth future upgrade of systems
Digital Library Infrastructure	Deployment of environment to host Acquisition of high performance scanner	Document management and access
VOIP PBX System	Deployment at the NIC Projects Office – Phase 1 Started deployment at the NIC Head Office – Phase 2 - 90% complete	Reduced operational cost Improve management capability of service

Management and use of IT resources

Performance Item	Year-To-Date March 2018	Comment		
	Actual	Target	Variance	
Number of databases developed /improved as a percentage of database projects started	83%	90%	-7%	Ongoing work on the CATS database
Number of IT Security breaches discovered or reported by users	0	0	0	
Downtime of IT Major System (Minutes)	0	2160	-2160	
Number of Help Desk requests satisfied within service standards as a percentage of total requests	96%	80%	16%	
Number of new/ improved business processes supported by IT	11	10	1	
Number of Projects Completed as a percent of total projects started	89%	95%	-6%	To complete outstanding project in first quarter of next period
% of major business processes supported by IT	77.00%	90.00%	-13.00%	
Information Systems Expenditure	$28,886,136	$31,639,402	$2,753,266	Total expenditure for period was within target. Due to investments to improve efficiency and cost savings

Information Systems performance matrix for management of resources.



Information Systems expenditure distribution by categories

Plans Ahead

In support of the strategic direction of the Commission, the Division plans to focus on the following:

- Implementation of automated procedures to support operations, human resources management and procurement;
- Configuration and support of the infrastructure to host corporate digital library to improve document management;
- Expansion of the in-house hosted Voice over Internet Protocol (VOIP) PBX system;
- Upgrading of receipt sub-system;
- Continuing the virtualisation of server environment for operational efficiency;
- Upgrading of network infrastructure to improve speed and security; and
- Software maintenance of mission critical applications.

Site visit as part of International Atomic Energy Attorney Project IAEAP project

Finance and Corporate Planning Division

The corporate objective of the Division is to continue the development of financial management systems to provide accurate, reliable, timely and relevant information for decision-making to ensure that the financial resources are utilised to drive service delivery.

Financial Summary

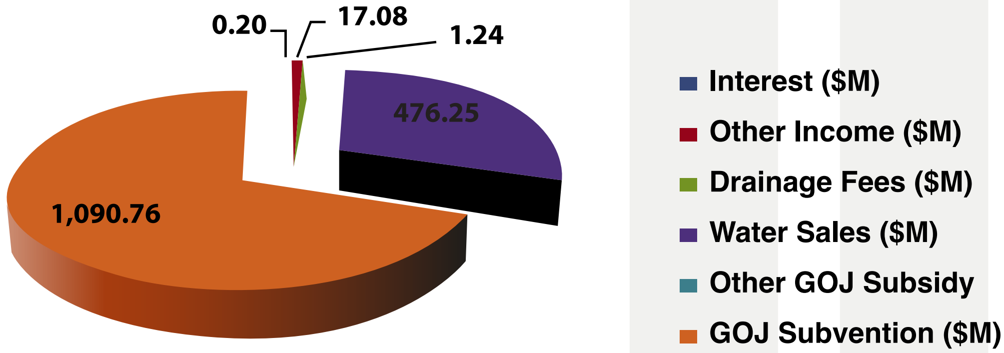
The Commission recorded a surplus of Fifty Four Million, Five Hundred and Sixty Five Thousand, Seven Hundred and Sixty Nine Dollars ($54,565,769) for the financial year 2017/2018. This represents an increase of $52.20m relative to the previous year's surplus of $2.36m.

Revenue

Total income for 2017/2018 was $1.57 billion, an increase of $0.16 billion, compared to the previous year's income figure of $1.42 billion. The increase in revenue was primarily due to increased Government of Jamaica subsidy to assist with electricity pumping cost.

REVENUE SUMMARY: March 2018 ($M): Year-To-Date

Revenue Items	Actual YTD	Budget YTD	Difference	Actual %
Interest ($M)	0.56	0.50	0.06	0.0%
Other Income ($)	9.83	5.53	4.30	0.6%
Drainage Fees ($M)	1.24	1.24	_	0.1%
Water Sales ($M)	476.25	686.39	(210.14)	30.2%
Other GOJ Subsidy	50.0	_	50.0	3.2%
GOJ Subvention ($M)	1,040.76	1,048.02	(7.26)	65.9%
Total	**1,578.64**	**1,741.18**	**(163.10)**	**100.0%**

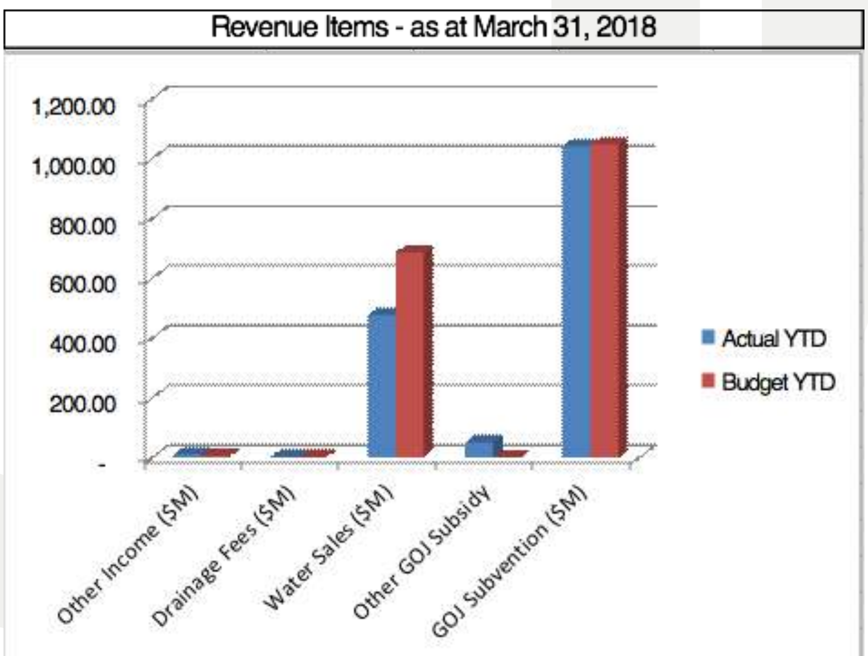


GOJ Subsidy

Government of Jamaica (GOJ), subsidy amounted to $1.09 billion or 69.2 per cent of total revenue. This exceeded the budgeted figure of $1.05 billion by $42.7 million or 4.0 per cent. The subsidy of $1.09 billion also represents an increase of $0.20 billion or 22.6 per cent compared to the figure of $889.87 million provided by the government in the previous year.

Water Sales

Revenue from water sales declined during the year, falling from $526.69 million in the previous year to $476.25 million, a reduction of $50.45 million or 9.6%. The reduced sales level was due primarily to the heavy rainfall experienced during the year resulting in reduced demand by the farmers for irrigation water.



During the year, routine maintenance work continued in order to ensure reliability of the irrigation conveyance system. Expansion work was also undertaken in the Amity Hall, Hounslow and Beacon/Little Park areas. The Commission also assumed full responsibility for the Monymusk irrigation system during the period.

The Commission supplied approximately 29.43 million cubic metres of water to large and small farmers as well as a number of industrial users. Agricultural users accounted for approximately 81.96 per cent of the water sales.

Income from Drainage Operations

Drainage work continued in the Upper and Lower Black River Morass during the year. Increased river cleaning became necessary against the background of the increased rainfall. Revenues from drainage charges continued to be flat at $1.2m as in previous years. The Commission anticipates satisfactory rate increases in this area which are more representative of the cost of providing this service.

Operating Expenditure

Total expenses for 2017/2018 amounted to $1.543 billion, an increase of $0.088 billion or 6.05% over the previous year's expenditure of $1.455 billion.

Operating cost amounted to $1.159 billion, an increase of $0.082 billion or 7.61% compared to the previous year's figure of $1.077 billion. Electricity pumping cost increased from $392.26 million in the previous year, to $413.69 million, an increase of $21.34 million or 5.44%. This was due directly to our increased operations in the Monymusk irrigation area. Management continued to implement cost control measures to reduce electricity pumping cost, including:

Management continued to implement cost control measures to reduce electricity pumping cost, including:

- Implementation of 'varied pumping hours' to effect operating efficiencies
- Use of JPS Co rates that better represent the Commission's pattern of usage
- Installation of variable frequency drives
- Farmer training to ensure on-farm water management

The Commission experienced increases in personnel cost paid arising directly from the five percent payment increase approved by the Ministry of Finance and Public Service (MOF & PS) for 2017/2018.

Capital Works

The NIC was provided with Capital A funding of $150 million to continue the canal restoration works in Mid-Clarendon and St. Catherine. Civil works which were undertaken include:

- Lower Main Canal Embankment – St. Catherine
- Upper Old Harbour - Phase 1
- Upper Old Harbour Branch Canal
- Lower Old Harbour Main Canal – Phase 1
- Lower Main Canal RCIW
- Old Milk River Rehabilitation – Phase 2
- Old Milk River Canal – Phase 3
- Old Milk River Decoy East – Phase 4
- Old Milk River Rehabilitation – Rhymesbury/Decoy – Phase 5
- Hounslow Irrigation Expansion

The Commission also made provision for adequate supplies of spare parts to be in place to ensure stability in the provision of service to the local farming community.

Total assets increased by $0.06 billion from $1.25 billion in the previous year to $1.31 billion at the end of March 2018. This was due primarily to Capital A funds provided by the MOF&PS for capital restoration in Mid-Clarendon and Southern St. Catherine.

Accounts payable and accrued charges increased from $311.74 million in the previous year to $341.41 million. $89.7 million of this amount was paid by the MOF&PS subsequent to year end.

Total comprehensive income for the year of $85.12 million resulted in the shareholders' equity increasing by 16.50% to reach $$600.94 million at the end of March 2018.

The commission engaged in a number of collaborations with local and international institutions including:

- The Caribbean Development Bank responsible for managing the UK-Caribbean Infrastructure Fund and for providing grant funding for the Essex Valley Agricultural Development Project.
- The French Government, for a FASEP Grant to fund the feasibility study for the Pedro Plains Expansion Project.
- Agro Investment Corporation, Agricultural Competitiveness Programme, Rural Agricultural Development Authority, Sugar Transformation Unit) of the Ministry of Industry, Commerce, Agriculture and Fisheries and the SCJ Holdings Limited.

Five Year Statistics

SIGNIFICANT METRICS	$000	$000	$000	$000	$000
	2017/2018	2016/2017	2015/2016	2014/2015	2013/2014
Shareholders' Equity % Inc/(dec.) compared to prior year	600,944 16.50%	515,828 0.64%	512,545 78.59%	286,990 -35.83%	447,268 -35.18%
Total Assets % Inc/(dec.) compared to prior year	1,315,186 5.03%	1,252,242 -0.92%	1,263,887 9.66%	1,152,446 -0.82%	1,161,994 -8.02%
PROFIT & LOSS ACCOUNT Operating Revenue (% Dec)% Inc. compared to prior year	1,568,249 10.61%	1,417,802 -5.58%	1,501,662 21.57%	1,235,205 25.46%	984,543 -2.12%
Accumulated Surplus (% Dec) % Inc. compared to pior year	192,715 79.10%	107,599 3.09%	104,374 -186.16%	-121,140 -409.52%	39,138 -82%
IMPORTANT RATIOS					
Admin. Exps. as a % of Total Cost	24.91%	25.97%	21.76%	20.66%	20.74%
Operating Exp. as a% of Total Cost	75.09%	74.03%	78.25%	79.73%	79.26%
Electricity Exp. as a % of Total Cost	26.79%	26.94%	35.49%	36.18%	29.99%
Electricity Exps. as a % Operating Cost	35.68%	36.40%	45.36%	45.59%	37.83%
Rates/Water Salews as a % of Total Cost	30.23%	36.28%	49.80%	44.37%	40.45%
Rates/ Water Sales as a % of Operating Cost	41,19%	49.02%	63.65%	55.86%	51.03%
GOJ Subsidy as a% of Total Cost	70.65%	61.15%	65.56%	46.10%	42.03%
GOJ Subsidy as a % of Operating Cost	94.04%	82.60%	83.85%	58.07%	53.03%

The Finance and Corporate Planning Division continued its efforts to develop and enhance the company's financial reporting systems through the implementation of a new payroll system and enhanced electronic formatting for most of the organisation's financial reports.

Internal Audit Unit

During the year, the Commission's Internal Audit Unit completed audits and investigations resulting in reports which produced numerous recommendations for improvements in internal controls and operations.

Twelve audits were planned, eleven completed and one still in progress.

Audit activities conducted during 2017/2018:

Operational

- Contracts – General works which included tendering, evaluation, selection, performance and termination.
- Procurement and management of items in stores, fixed Assets such as furniture and electronic equipment, annual stock and inventory survey.
- Projects - maintenance of open canals.
- Outstation visits to districts and project sites.
- Special Assignment.

Financial

- Examination of the NIC's financial operations.

Administrative

- Review of human resource processes.

Field Operations

- Review of pump house operations.

Procurement Audit

- NIC's property management audit

Directors' Compensation

Position of Director	Fees ($)	Motor Vehicle Upkeep/Travelling or Value of Assignment of Motor Vehicle ($)	Honoraria ($)	All Other Compensation including non-Cash Benefits as applicable ($)	Total ($)
Chairman Current: Aubyn Hill	172,179.40		-	-	172,179.40
Deputh Chairman: Current: Dr. Horace Charoo	128,437.50	14,840.00	-	-	143,277.50
Statutory Director Current: Anthony Masters	141,244.00	115,262.00	-	-	256,506.00
Statutory Director Current: Genille Attalla	108,816.50	142,898.00	-	-	251,714.50
Statutory Director Current: George Wright	125,498.00	168,366.00	-	-	293,864.00
Statutory Director Current: Joseph Handal	112,137.80	28,406.80	-	-	140,544.60
Statutory Director Current: Krishan James	119,998.50	168,678.00	-	-	288,676.50
Statutory Director Current: Nigel Myrie	208,637.00	336,238.00	-	-	544,875.00
Statutory Director Current: Ralden Ballanfante	117,164.00	156,224.00	-	-	273,388.00
Statutory Director Current: Robert Martin	52,500.00	3,290.00	-	-	55,790.00
Statutory Director Current: Rupert Williams	115,903.40	46,971.20	-	-	162,874.60
Statutory Director Current: Sharon Williamson	128,294.90	21,789.20	-	-	150,084.10
Statutory Director Current: Theresa Turner	129,573.00	61,069.00	-	-	190,642.00
Total A	**1,660,384.00**	**1,264,032.20**	**-**	**-**	**2,924,416.20**

BOARD SUB-COMMITTEE COMPENSATION (B)					
Horace Buckley: Rep. Science, Technolog, Energy and Mining; Committee - Projects, Energy and Technology	33,300.00	4,136.00	-	-	37,436.00
Lancelot White: Rep. Sugar Industry Research Institute; Committee - Projects, Energy and Technology	20,812.50	30,933.00	-	-	51,745.50
Sacha Lawrence Rose: Rep. Ministry of Finance & Public Service; Committee - Audit	10,950.00	2,632.00	-	-	13,582.00
Total B	65,062.50	37,701.00	-	-	102,763.50
Total A and B	1,725,446.50	1,301,733.20	-	-	3,027,179.70

Executives' Emoluments

Position of Senior Executive	Year	Salary ($)	Gratuity/ Performance Incentive	Travelling Allowance	*Other Allowances ($)	Total ($)
*** CHIEF EXECUTIVE OFFICER (ACTG.) - Joseph Gyles	2017/2018	5,457,567	-	1,006,218	1,234,828	7,698,613
** CHIEF EXECUTIVE OFFICER (ACTG.) - Oliver Nembhard	2017/2018	1,000,637	-	111,802	120,596	1,233,035
DIRECTOR FINANCE & CORP PLANNING - Edgar Watson	2017/2018	5,159,383	-	1,341,624	324,636	6,825,643
DIRECTOR OF COMMERCIAL OPERATIONS - Wayne Barrett	2017/2018	5,140,693	-	1,341,624	95,682	6,577,999
DIR. ENGINEERING & TECH SERVICES (ACTG.) - Rohan Stewart	2017/2018	3,608,475	-	1,183,080	1,818,613	6,610,168
PROJECT DIRECTOR - Milton Henry	2017/2018	6,386,200	-	1,341,624	1,580,750	9,308,574
DIRECTOR OF CORPORATE & LEGAL SERV - Viola Cammock	2017/2018	4,779,408	-	1,341,624	835,700	6,956,732
TOTAL		**31,532,362**	**-**	**7,667,596**	**6,010,805**	**45,210,763**

* Other allowances refer to reimbursement of toll charges, payment of motor vehicle mileage and acting allowances.

** V. Oliver Nembhard: October 5, 1950 – May, 2017

*** Joseph Gyles: Acting appointment May 29, 2017; Full appointment October 2, 2017

Corporate Data

REGISTERED OFFICE	THE OPERATION CENTRE
National Irrigation Commission Limited Head Office 191 Old Hope Road, Kingston 6 Tel: (876) 977-4022/6727 or (876) 618-0172 Fax: (876) 927-2696 E-mail: nic@cwjamaica.com	15 Barrett Street, Spanish Town, St. Catherine Tel: (876) 984-0625/5792 or (876) 469-1910 Fax: (876) 984-0532

DISTRICT OFFICES

St. Catherine Irrigation District Rio Cobre Office 17 Barrett Street, Spanish Town, St. Catherine Tel: (876) 984-2334 or (876) 489-8801 Fax: (876) 984-8401	New Forest Irrigation District Duff House New Forest Office New Forest P.A., Manchester Tel: (876) 371-0794
St. Dorothy Office Bodles, Old Harbour, St. Catherine Tel: (876) 983-2712 or (876) 489-8781 Fax: (876) 745-2759	St. Elizabeth Irrigation & Drainage District Hounslow Office Watchwell P.A., St. Elizabeth Tel: (876) 965-0714 or (876) 489-8918 Fax: (876) 965-0232
Yallahs Irrigation District Yallahs Office Yallahs, St. Thomas Tel: (876) 706-3159 or (876) 489-8912 Fax: (876) 706-3160	Braco Irrigation District Braco Office Duncans, Trelawny Tel: (876) 954-2147 or (876) 489-9095 Fax: (876) 954-2295
Mid-Clarendon Irrigation District Mid-Clarendon Office Osbourne Store, Clarendon Tel: (876) 987-3140/3259 or (876) 469-1909 Fax: (876) 987-3139	

AUDITORS

KPMG 6 Duke Street Kingston,Jamaica Tel: (876) 922-6640 Fax: (876) 922-7198	Attorneys-at-Law DunnCox 48 Duke Street Kingston, Jamaica Tel: (876) 965-0714 Fax: (876) 965-0232

NATIONAL IRRIGATION COMMISSION LIMITED

FINANCIAL STATEMENTS

MARCH 31, 2018

KPMG
Chartered Accountants
P.O. Box 76
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Kingston
Jamaica, W.I.
+1 (876) 922 6640
firmmail@kpmg.com.jm

INDEPENDENT AUDITORS' REPORT

To the Members of
NATIONAL IRRIGATION COMMISSION LIMITED

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of National Irrigation Commission Limited ("the company"), set out on pages 5 to 41, which comprise the statement of financial position as at March 31, 2018, the statements of profit or loss and other comprehensive income, changes in equity and cash flows for the year then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, the accompanying financial statements give a true and fair view of the financial position of the company as at March 31, 2018 and of the company's financial performance and cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS) and the Jamaican Companies Act.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the company in accordance with the International Ethics Standards Board for Accountants Code of Ethics for Professional Accountants (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with the IESBA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

INDEPENDENT AUDITORS' REPORT (CONTINUED)

To the Members of
NATIONAL IRRIGATION COMMISSION LIMITED

Report on the Audit of the Financial Statements (Continued)

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation of financial statements that give a true and fair view in accordance with IFRS and the Jamaican Companies Act, and for such internal control as 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, management is responsible for assessing the company'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 management either intends to liquidate the company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the company's financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our 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 auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs 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 these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We 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 our 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.

KPMG

INDEPENDENT AUDITORS' REPORT (CONTINUED)

To the Members of
NATIONAL IRRIGATION COMMISSION LIMITED

Report on the Audit of the Financial Statements (Continued)

Auditors' Responsibilities for the Audit of the Financial Statements (Continued)

- 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 company's internal control.

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

- Conclude on the appropriateness of management's use of the 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 company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the company 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.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

INDEPENDENT AUDITORS' REPORT (CONTINUED)

To the Members of
NATIONAL IRRIGATION COMMISSION LIMITED

Report on additional matters as required by the Jamaican Companies Act

We have obtained all the information and explanations which, to the best of our knowledge and belief, were necessary for the purposes of our audit.

In our opinion, proper accounting records have been maintained, so far as appears from our examination of those records, and the financial statements, which are in agreement therewith, give the information required by the Jamaican Companies Act in the manner required.

KPMG

Chartered Accountants
Kingston, Jamaica

July 12, 2018

NATIONAL IRRIGATION COMMISSION LIMITED

Statement of Financial Position
March 31, 2018

	Notes	2018	2017
CURRENT ASSETS			
Cash and cash equivalents	4	162,369,566	128,476,981
Investments	5	11,668,170	22,683,918
Accounts receivable	6	123,395,115	116,615,066
Current portion of long-term receivables	7	8,432,920	9,043,179
Inventories		70,418,924	63,500,990
Income tax recoverable		9,140,998	9,097,119
Total current assets		385,425,693	349,417,253
NON-CURRENT ASSETS			
Long-term receivables	7	12,437,947	8,387,410
Employee benefits asset	8(a)	198,287,000	158,451,000
Intangible asset	9	3,915,166	5,220,132
Property, plant and equipment	10	715,120,770	730,766,006
Total non-current assets		929,760,883	902,824,548
Total assets		**$1,315,186,576**	**1,252,241,801**
CURRENT LIABILITIES			
Accounts payable and accrued charges	11	341,414,000	311,748,722
Government of Jamaica project advances	12	26,828,207	113,544,605
Taxation		53,732,545	39,738,616
Total current liabilities		421,974,752	465,031,943
NON-CURRENT LIABILITY			
Deferred credit, being total non-current liability	13	292,267,417	271,382,220
Total liabilities		714,242,169	736,414,163
EQUITY			
Share capital	14	100	100
Capital reserve	15	408,130,161	408,130,161
Investment revaluation reserve	16	98,712	98,712
Accumulated surplus		192,715,434	107,598,665
Total equity		600,944,407	515,827,638
Total liabilities and equity		**$1,315,186,576**	**1,252,241,801**

The financial statements on pages 5 to 41 were approved for issue by the Board of Directors on July 12, 2018 and signed on its behalf by:

______________________ Chairman
Senator Aubyn Hill

______________________ Director
Nigel Myrie

The accompanying notes form an integral part of the financial statements.

NATIONAL IRRIGATION COMMISSION LIMITED

Statement of Profit or Loss and Other Comprehensive Income
Year ended March 31, 2018

	Notes	2018	2017
Operating revenue			
Water sales and drainage charges		477,487,014	527,931,174
Government of Jamaica subsidy on behalf of farmers	17	1,040,762,334	830,156,069
Other Government of Jamaica subsidy		50,000,000	59,714,712
		1,568,249,348	1,417,801,955
Cost of producing water and distributing it to farm gates	19	(1,159,134,589)	(1,077,282,182)
Gross operating surplus		409,114,759	340,519,773
Amortisation of deferred credit	13	33,633,383	33,899,714
Other income	18	9,838,339	5,214,005
Administrative expenses	19	(384,584,936)	(377,990,510)
Surplus before net finance income and taxation		68,001,545	1,642,982
Net finance income	20	558,153	722,627
Surplus before taxation		68,559,698	2,365,609
Taxation charge	21	(13,993,929)	-
Surplus for the year	22	54,565,769	2,365,609
Other comprehensive income			
Item that will never be reclassified to profit or loss			
Remeasurement of employee benefits asset	8(f)	30,551,000	859,000
Item that is or may be reclassified subsequently to profit or loss			
Increase in the fair value of available-for-sale investments		-	58,127
Total other comprehensive income		30,551,000	917,127
Total comprehensive income for the year		$ 85,116,769	3,282,736

The accompanying notes form an integral part of the financial statements.

NATIONAL IRRIGATION COMMISSION LIMITED

Statement of Changes in Equity
Year ended March 31, 2018

	Share capital Note 14	Capital reserve Note 15	Investment revaluation reserve Note 16	Accumulated surplus	Total
Balances at March 31, 2016					
As previously reported	100	408,130,161	40,585	206,164,476	614,335,322
Prior year adjustments (note 29)	-	-	-	(101,790,420)	(101,790,420)
As restated	100	408,130,161	40,585	104,374,056	512,544,902
Surplus for the year	-	-	-	2,365,609	2,365,609
Other comprehensive income					
Remeasurement of employee benefits asset	-	-	-	859,000	859,000
Increase in fair value of available-for-sale investments	-	-	58,127	-	58,127
Total other comprehensive income	-	-	58,127	859,000	917,127
Total comprehensive income for the year	-	-	58,127	3,224,609	3,282,736
Balances at March 31, 2017	100	408,130,161	98,712	107,598,665	515,827,638
Surplus for the year	-	-	-	54,565,769	54,565,769
Other comprehensive income					
Remeasurement of employee benefits asset, being total comprehensive income	-	-	-	30,551,000	30,551,000
Total comprehensive income for the year	-	-	-	85,116,769	85,116,769
Balances at March 31, 2018	$100	408,130,161	98,712	192,715,434	600,944,407

The accompanying notes form an integral part of the financial statements.

NATIONAL IRRIGATION COMMISSION LIMITED

Statement of Cash Flows
Year ended March 31, 2018

	Notes	2018	2017
Cash flows from operating activities			
Surplus for the year		54,565,769	2,365,609
Adjustments:			
Depreciation	10	45,458,735	41,818,062
Amortisation of intangible asset	9	1,304,966	1,304,965
Amortisation of deferred credit	13	(33,633,383)	(33,899,714)
Asset written off	10	15,890,556	-
Employee benefits asset		(9,285,000)	(3,802,000)
Interest expense	20	3,200	-
Interest income	20	(561,353)	(722,627)
Taxation	21	13,993,929	-
Foreign exchange gains on bank balances		(3,470)	(34,085)
		87,733,949	7,030,210
Decrease/(increase) in current assets			
Investments		11,015,748	(2,340,287)
Accounts receivable		(6,215,798)	38,942,027
Inventories		(6,917,934)	7,243,832
Income tax recoverable		(43,878)	(77,124)
(Decrease)/increase in current liabilities			
Accounts payable and accrued charges		29,665,279	3,631,382
Government of Jamaica project advances		(86,716,398)	16,585,078
Net cash provided by operating activities		28,520,968	71,015,118
Cash flows from investing activity			
Purchase of property, plant and equipment	10	(45,704,055)	(31,552,792)
Long-term receivables		(4,050,537)	8,141,488
Interest received		607,359	731,964
Interest paid		(3,200)	-
Net cash used in investing activities		(49,150,433)	(22,679,340)
Cash flows from financing activities			
Deferred credit		54,518,580	-
Long-term liability		-	(1,244,845)
Net cash provided by/(used in) financing activities		54,518,580	(1,244,845)
Net increase in cash and cash equivalents		33,889,115	47,090,933
Effect of exchange rate fluctuations on cash held		3,470	34,085
Cash and cash equivalents at beginning of the year		128,476,981	81,351,963
Cash and cash equivalents at end of the year		$162,369,566	128,476,981

The accompanying notes form an integral part of the financial statements.

1. Identification

National Irrigation Commission Limited (company) is incorporated and domiciled in Jamaica, and is wholly-owned by the Government of Jamaica through the Accountant General. The company's registered office is located at 191 Old Hope Road, Kingston 6.

The principal activities of the company are:

(a) The management, operation, maintenance and expansion of existing and future irrigation schemes established by the Government of Jamaica. The principal schemes currently in operation are Hounslow, Braco, Mid-Clarendon, Rio Cobre, Yallahs, Beacon/Little Park, Seven Rivers, Colbeck, St. Dorothy, New Forest and Yallahs IDB.

(b) The identification and designation of the persons who shall be entitled to use the water generated by the irrigation schemes and the fixing and collection of rates or charges for such services rendered.

2. Statement of compliance and basis of preparation

(a) Statement of compliance

The financial statements are prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and comply with the provisions of the Jamaican Companies Act.

New and amended standards that became effective during the year

Certain new and amended standards which were issued, came into effect during the current financial year. The company has assessed them and has adopted those which are relevant to the financial statements, viz;

- Amendments to IAS 7, *Statement of Cash Flows*, effective for accounting periods beginning on or after January 1, 2017, requires an entity to provide disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash flows.

- Amendments to IAS 12, *Income Taxes*, effective for accounting periods beginning on or after January 1, 2017, clarifies the following:

  - The existence of deductible temporary difference depends solely on a comparison of the carrying amount of an asset and its tax base at the end of the reporting period, and is not affected by possible future changes in the carrying amount or expected manner of recovery of the asset.

  - A deferred tax asset can be recognised if the future bottom line of the tax return is expected to be a loss, if certain conditions are met.

2. Statement of compliance and basis of preparation (continued)

(a) Statement of compliance (continued)

New and amended standards that became effective during the year (continued)

- Amendments to IAS 12, *Income Taxes*, (continued)

  - Future taxable profits used to establish whether a deferred tax can be recognised should be the amount calculated before the effect of reversing temporary differences.

  - An entity can assume that it will recover an asset for more than its carrying amount if there is sufficient evidence that it is probable that the entity will achieve this.

  - Deductible temporary differences related to unrealised losses should be assessed on a combined basis for recognition unless a tax law restricts the use of losses to deductions against income of a specific type.

The adoption of these amended standards did not result in any changes to the presentation and disclosures in the financial statements.

New and amended standards and interepretations issued but not yet effective

At the date of approval of these financial statements, certain new and amended standards were in issue but were not yet effective and had not been early-adopted by the company. The company has assessed them and has concluded that the following may be relevant to its operations:

- The company is required to adopt IFRS 9, *Financial Instruments* from January 1, 2018. The standard replaces IAS 39, *Financial Instruments: Recognition and Measurement* and sets out requirements for recognising and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. IFRS 9 contains a new classification and measurement approach for financial assets that reflects the business model in which assets are managed and their cash flow characteristics. It contains three principal classification categories for financial assets: measured at amortised cost, fair value through other comprehensive income (FVOCI) and fair value through profit or loss (FVTPL).

  The standard eliminates the existing IAS 39 categories of held-to-maturity, loans and receivables and available-for-sale. Based on its preliminary assessment, the company does not believe that the new classification requirements will have a material impact on its accounting for accounts receivables, long-term receivables, investments. However, the company is still in the process of its assessment and the final impact has not yet been determined.

2. Statement of compliance and basis of preparation (continued)

(a) Statement of compliance (continued)

New and amended standards and interepretations issued but not yet effective (continued)

- IFRS 9, *Financial Instruments (continued)*

  IFRS 9 replaces the 'incurred loss' model in IAS 39 with a forward-looking 'expected credit loss' (ECL) model. This will require considerable judgement about how changes in economic factors affect ECLs, which will be determined on a probability-weighted basis. The new impairment model will apply to financial assets measured at amortised cost or FVOCI, except for investments in equity instruments

  Under IFRS 9, loss allowances will be measured on either of the following bases:

  (i) 12-month ECLs: these are ECLs that result from possible default events within the 12 months after the reporting date; and

  (ii) Lifetime ECLs: these are ECLs that result from all possible default events over the expected life of a financial instrument.

  Lifetime ECL measurement applies if the credit risk of a financial asset at the reporting date has increased significantly since initial recognition and 12-month ECL measurement applies if it has not. An entity may determine that a financial asset's credit risk has not increased significantly if the asset has low credit risk at the reporting date. However, lifetime ECL measurement always applies for short-term receivables without a significant financing component.

  The company believes that impairment losses are likely to increase and become more volatile for assets in the scope of IFRS 9 impairment model. However, the company is still in the process of determining the likely financial impact on its financial statements.

  IFRS 9 will require extensive disclosures, in particular for credit risk and ECLs. The company's assessment included an analysis to identify data gaps against current processes and the company is in the process of implementing the system and controls changes that it believes will be necessary to capture the required data.

  Changes in accounting policies resulting from the adoption of IFRS 9 will generally be applied retrospectively, except as follows:

  - The company will take advantage of the exemption allowing it not to restate comparative information for prior periods with respect to classification and measurement as well as impairment changes. Differences in the carrying amounts of financial instruments resulting from the adoption of IFRS 9 will generally be recognised in retained earnings and reserves as at January 1, 2018.

  - The following assessments have to be made on the basis of the facts and circumstances that exist at the date of initial application:

    (i) The determination of the business model within which a financial asset is held.

2. Basis of preparation (continued):

(a) Statement of compliance (continued):

New and amended standards and interpretations issued but not yet effective (continued)

- IFRS 9, *Financial Instrument* (continued)

  - The following assessments have to be made on the basis of the facts and circumstances that exist at the date of initial application (continued):

    (ii) The designation and revocation of previous designations of certain financial assets as measured at FVTPL.

    (iii) The designation of certain investments in equity investments not held for trading at FVOCI.

- The company is required to adopt IFRS 15, *Revenue from Contracts with Customers* from January 1, 2018. The standard established a comprehensive framework for determining whether, how much and when revenue is recognised. It replaces existing revenue recognition guidance, including IAS 18, *Revenue*, IAS 11, *Construction Contracts* and IFRIC 13*, Customer Loyalty Programmes*.

  The company will apply a five-step model to determine when to recognise revenue, and at what amount. The model specifies that revenue should be recognised when (or as) an entity transfers control of goods or services to a customer at the amount to which the entity expects to be entitled. Depending on whether certain criteria are met, revenue is recognised at a point in time, when control of goods or services is transferred to the customer; or over time, in a manner that best reflects the entity's performance.

  Management has assessed that the main impact of this standard is in respect of fees and commission income. The company earns revenue from sales and drainage services as well as government subsidy and other funding. Based on preliminary review, IFRS 15 is not expected to have a material impact on the timing and recognition of the company's revenue. However, management has not yet completed its assessment and the financial impact has not yet being determined.

- IFRS 16*, Leases,* which is effective for annual reporting periods beginning on or after January 1, 2019, eliminates the current dual accounting model for lessees, which distinguishes between on-balance sheet finance leases and off-balance sheet operating leases. Instead, there is a single, on-balance sheet accounting model that is similar to current finance lease accounting. Companies will be required to bring all major leases on-balance sheet, recognising new assets and liabilities. The on-balance sheet liability will attract interest; the total lease expense will be higher in the early years of a lease even if a lease has fixed regular cash rentals. Optional lessee exemption will apply to short- term leases and for low-value items with value of US$5,000 or less.

  Lessor accounting remains similar to current practice as the lessor will continue to classify leases as finance and operating leases. Finance lease accounting will be based on IAS 17 lease accounting, with recognition of net investment in lease comprising lease receivable and residual asset. Operating lease accounting will be based on IAS 17 operating lease accounting.

2. Basis of preparation (continued):

(a) Statement of compliance (continued):

New and amended standards and interpretations issued but not yet effective (continued)

- IFRIC 23, *Uncertainty Over Income Tax Treatments*, is effective for annual reporting periods beginning on or after January 1, 2019. Earlier application is permitted. IFRIC 23 clarifies the accounting for income tax treatments that have yet to be accepted by tax authorities is to be applied to the determination of taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates, when there is uncertainty over income tax treatments under IAS 12.

  An entity has to consider whether it is probable that the relevant tax authority would accept the tax treatment, or group of tax treatments, that is adopted in its income tax filing.

  If the entity concludes that it is probable that the tax authority will accept a particular tax treatment in the tax return, the entity will determine taxable profits (tax losses), tax bases, unused tax losses, unused tax credits or tax rates consistently with the tax treatment included in its income tax filings and record the same amount in the financial statements. The entity will disclose uncertainty.

  If the entity concludes that it is not probable that a particular tax treatment will be accepted, the entity has to use the most likely amount or the expected value of the tax treatment when determining taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates. The decision should be based on which method provides better prediction of the resolution of the uncertainty.

  If facts and circumstances change, the entity is required to reassess the judgements and estimates applied.

  IFRIC 23 reinforces the need to comply with existing disclosure requirements regarding:

  - judgements made in the process of applying accounting policy to determine taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates;
  - assumptions and other estimates used; and
  - potential impact of uncertainties that are not reflected in the financial statements.

- Amendments to IFRS 9, *Financial Instruments*, effective retrospectively for annual periods beginning on or after January 1, 2019 clarifies the treatment of:

  (i) Prepayment features with negative compensation

  Financial assets containing prepayment features with negative compensation can now be measured at amortised cost or at fair value through other comprehensive income (FVOCI) if they meet the other relevant requirements of IFRS 9.

2. Basis of preparation (continued)

(a) Statement of compliance (continued):

New and amended standards and interpretations issued but not yet effective (continued)

- Amendments to IFRS 9, *Financial Instruments* (continued):

  (ii) Modifications to financial liabilities

  If the initial application of IFRS 9 results in a change in accounting policy arising from modified or exchanged fixed rate financial liabilities, retrospective application is required, subject to particular transitional reliefs. There is no change to the accounting for costs and fees when a liability has been modified, but not substantially. These are recognised as an adjustment to the carrying amount of the liability and are amortised over the remaining term of the modified liability.

  The company is assessing the impact that these new standards, amendments and interpretations may have on its financial statements, when they are adopted.

(b) Basis of preparation

The financial statements are prepared on the historical cost basis, except for available-for-sale investments carried at fair value, and are presented in Jamaica dollars which is the functional currency of the company.

The preparation of the financial statements in accordance with IFRS assumes that the company will continue in operational existence for the foreseeable future. This means, in part, that the statements of profit or loss and other comprehensive income and financial position assume no intention or necessity to liquidate the company or curtail the scale of operations. This is commonly referred to as the going concern basis.

(c) Accounting estimates and judgements

The preparation of the financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amounts of, and disclosures relating to, assets, liabilities, contingent assets and contingent liabilities at the reporting date and the income and expenses for the year then ended. Actual amounts could differ from those estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the year in which the estimate is revised, if the revision affects only that year, or in the year of the revision and future years, if the revision affects both current and future years.

2. Basis of preparation (continued)

(c) Accounting estimates and judgements (continued)

Key sources of estimation uncertainty

Judgements made by management in the application of IFRS that have a significant effect on the financial statements and estimates with a significant risk of material adjustment in the next financial year are presented below:

- Pension benefits

  The amounts recognised in the statements of financial position and profit or loss and other comprehensive income for pension benefits are determined actuarially using several assumptions. The primary assumptions used in determining the amounts recognised include the discount rate used to determine the present value of estimated future cash flows required to settle the pension obligations.

  The discount rate is determined based on the estimate of yield on long-term Government of Jamaica securities that have maturity dates approximating the terms of the company's obligation; in the absence of such instruments in Jamaica, it has been necessary to estimate the rate by extrapolating from the longest-tenor security on the market. Any changes in loss assumptions would impact the amounts recorded in the financial statements for these obligations.

- Allowance for impairment losses

  In determining amounts recorded for impairment of accounts receivable in the financial statements, management makes judgements regarding indicators of impairment, that is, whether there are indicators that suggest there may be a measurable decrease in the estimated future cash flows from accounts receivable, for example, repayment default and adverse economic conditions. Management also makes estimates of the likely estimated future cash flows from impaired accounts receivable, as well as the timing of such cash flows. Historical loss experience is applied where indicators of impairment are not observable on individual significant accounts receivable and total trade accounts receivable with similar characteristics, such as credit risks.

- Determination of fair value of investments

  When determining the fair value of investments, the company uses valuation techniques that maximise the use of relevant observable inputs and minimise the use of unobservable inputs. The chosen valuation technique incorporates all the factors that market participants would take into account in pricing a unit.

3. Significant accounting policies

(a) Financial instruments: - classification, recognition and derecognition, and measurement

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. In these financial statements, financial assets have been determined to comprise cash and cash equivalents, investments, accounts receivable and long-term receivables. Financial liabilities comprise accounts payable and accrued charges and Government of Jamaica project advances.

Financial instruments are classified, recognised and measured in accordance with the substance of the terms of the contracts as set out herein.

(i) Classification of financial instruments

The company classifies non-derivative financial assets as loans and receivables and available-for-sale. Management determines the appropriate classification of investments at the time of purchase. Securities acquired and loans granted with fixed or determinable payments and which are not quoted in an active market, are classified as loans and receivables. Securities are classified as available-for-sale because they are designated as such or are not classified in any of the other categories.

The company classifies non-derivative financial liabilities into the other financial liabilities category.

(ii) Non-derivative financial assets and financial liabilities – recognition and derecognition
The company recognises a financial instrument when it becomes a party to the contractual terms of the instrument.

The company initially recognises loans and receivables and debt securities on the date when they are originated. All other financial assets and financial liabilities are initially recognised on the trade date.

The company 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 in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred, or it neither transfers nor retains all or substantially all the risks and rewards of ownership and does not retain control over the transferred asset. Any interest in such derecognised financial assets that is created or retained by the company is recognised as a separate asset or liability.

The company derecognises a financial liability when its contractual obligations expire or are discharged or cancelled.

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

3. Significant accounting policies (continued)

(a) Financial instruments: - classification, recognition and derecognition, and measurement (continued)

(iii) Non-derivative financial assets – measurement

Loans and receivables: On initial recognition loans and receivables are measured at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, they are measured at amortised cost, using the effective interest method, less impairment losses.

(b) Cash and cash equivalents

Cash comprises cash in hand and demand and call deposits with banks. Cash equivalents are short-term, highly liquid investments where original maturities do not exceed three months, are readily convertible to known amounts of cash, are subject to an insignificant risk of changes in value, and are held for the purpose of meeting short-term cash commitments, rather than for investment or other purposes. Cash and cash equivalents are measured at amortised cost.

(c) Investments

Investments consist of resale agreements and units held in NCB Capital Markets CAPFunds.

(i) The company purchases Government securities and agrees to resell them on a specified date and at a specified price (‘resale agreements’ or ‘reverse repurchase agreements’). The company, on paying cash to the counterparty, sometimes, takes possession of the underlying securities, although title is not formally transferred, unless that counterparty fails to repurchase the securities on the date specified or to honour other conditions.

Resale agreements are accounted for as short-term collateralised lending. Resale agreements are classified as loans and receivables and are carried at amortised cost less impairment. The difference between the purchase and resale considerations is recognised on the accrual basis over the period of the engagement, using the effective interest method.

(ii) Units held in NCB Capital Markets CAPFunds are classified as available-for-sale and are carried at fair value. Changes in the fair value are included in the investment revaluation reserve.

(d) Property, plant and equipment and depreciation

(i) Owned assets

Property, plant and equipment are measured at cost, less accumulated depreciation and impairment losses [see note 3(h)].

Cost includes expenditures that are directly attributable to the acquisition of the asset. 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 benefits embodied in the part will flow to the company and its cost can be reliably measured.

3. Significant accounting policies (continued)

(d) Property, plant and equipment and depreciation (continued)

(ii) Depreciation

Property, plant and equipment with the exception of capital work-in-progress are depreciated using the straight-line method at annual rates estimated to write down the assets to their residual values over their expected useful lives. The depreciation rates are as follows:

Building and leasehold improvements	2½%
Utility plant	2-3%
Furniture, fixtures and equipment	10% and 20%
Motor vehicles	20%
Machinery and equipment	2½%

The depreciation rates, useful lives and residual values are reassessed at each reporting date.

(e) Capital grants

Grants for acquisition of property, plant and equipment and amounts equivalent to the value of property, plant and equipment received as gifts, (including an amount equivalent to the values ascribed to utility plant at the districts, which were taken over by way of gift in 1990), are included in the Deferred Credit account. Annually, an amount equivalent to the depreciation charge for the year on these assets is transferred to surplus or deficit.

(f) Inventories

Inventories are measured at the lower of cost or net realisable value determined on the first-in-first-out basis.

(g) Employee benefits

Employee benefits comprise all forms of consideration given by the company in exchange for service rendered by employees. These include current or short-term benefits such as salaries, bonuses, NIS contributions, annual leave; post-employments benefits such as pension; and other long-term employee benefits such as termination benefits.

Employee benefits that are earned as a result of past or current service are recognised in the following manner: Short-term employee benefits are recognised as a liability, net of payments made, and charged as expense. The expected cost of vacation leave that accumulates is recognised when the employee becomes entitled to the leave. Post-employment benefits are accounted for as described below.

3. Significant accounting policies (continued)

(g) Employee benefits (continued)

Post-employment benefits, comprising pension obligations, included in the financial statements, are actuarially determined by a qualified independent actuary, appointed by management. The appointed actuary's report outlines the scope of the valuation and the actuary's opinion. The actuarial valuation is conducted in accordance with IAS 19, and the financial statements reflect the company's post-employment benefit asset as computed by the actuary. In carrying out their audit, the auditors rely on the work of the actuary and the actuary's report.

(i) Defined benefit pension plan

The company's net asset in respect of the defined-benefit pension plan is calculated by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that value is discounted to determine the present value, and the fair value of any plan assets is deducted. The discount rate is the yield at reporting date on long-term Government of Jamaica bonds that have maturity dates approximating the terms of the company's obligation. The calculation is performed by a qualified actuary, using the projected unit credit method.

When the benefits of the plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in profit or loss. The company recognises gains and losses on the settlement of a defined benefit plan when the settlement occurs.

Remeasurement of the net benefit asset, which comprises actual gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognised immediately in other comprehensive income. The company determines the net interest income on the net defined benefit asset for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then-net defined benefit asset, taking into account any changes in the net defined benefit asset during the period as a result of contributions and benefit payments. Net interest expense and other expenses related to defined benefit plans are recognised in surplus or deficit.

(ii) Termination benefits

Termination benefits are expected at the earlier of when the company can no longer withdraw the offer of those benefits and when the company recognises cost for a restructuring. If benefits are not expected to be settled wholly within 12 months of the end of the reporting period, then they are discounted.

(h) Impairment

The carrying amounts of the company's assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, the asset's recoverable amount is estimate. An impairment loss is recognised whenever the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognised in surplus or deficit.

3. Significant accounting policies (continued)

(h) Impairment (continued)

(i) Calculation of recoverable amount

The recoverable amount of the company's receivables is calculated as the present value of expected future cash flows, discounted at the original effective interest rate inherent in the asset. Receivables with a short duration are not discounted.

The recoverable amount of other assets is the greater of their fair value less costs to sell and value in use. 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 an asset that does not generate largely independent cash inflows, the recoverable amount is determined for the cash-generating unit to which the asset belongs.

(ii) Reversals of impairment

An impairment loss in respect of receivables is reversed, if the subsequent increase in recoverable amount can be related objectively to an event occurring after the impairment loss was recognised.

If the fair value of an impaired available-for-sale debt security subsequently increases and the increase can be related objectively to an event occurring after the impairment loss was recognised, then the impairment loss is reversed through the income statement; otherwise subsequent increases in fair value are recognised through other comprehensive income.

In respect of other assets, an impairment loss is reversed, if there has been a change in the estimates used to determine the recoverable amount.

An impairment loss is reversed only to the extent that the assets carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

Impairment losses on available-for-sale financial assets are recognised by reclassifying the losses accumulated in the fair value reserve to the income statement. The amount reclassified is the difference between the acquisition cost (net of any principal repayment and amortisation) and the current fair value, less any impairment loss previously recognised in the income statement.

(i) Taxation

Income tax on the surplus or deficit for the year comprises current and deferred tax. Income tax is recognised in surplus or deficit, except to the extent that it relates to items recognised in other comprehensive income in which case it is recognised in other comprehensive income.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

3. Significant accounting policies (continued)

(i) Taxation (continued)

Deferred tax is provided for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The amount of deferred tax provided is based on the expected manner of realisation or settlement of the carrying amount of assets and liabilities, using tax rates enacted at the reporting date.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the asset can be utilised. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

(j) Accounts receivable

Accounts receivable are measured at their amortised cost, less impairment losses.

(k) Intangible asset

Intangible asset, which represents computer software costs, is measured at cost less accumulated amortisation and, if any, impairment losses. It is being amortised on the straight-line basis at annual rates estimated to write down the assets over their expected useful lives, not exceeding a period of ten years. Costs associated with maintaining computer software programs are recognised as expense as incurred.

(l) Accounts payable and accrued charges

Accounts payable and accrued charges are measured at their amortised cost.

(m) Foreign currencies

Foreign currency balances at the reporting date are translated at the rates of exchange ruling on that date.

Transactions in foreign currencies are converted at the rates of exchange ruling at the dates of those transactions.

Gains and losses arising from fluctuations in exchange rates are included in surplus or deficit.

(n) Related parties

A related party is a person or entity that is related to the company.

(A) A person or a close member of that person's family is related to the company if that person:

(i) has control or joint control over the company;
(ii) has significant influence over the company; or
(iii) is a member of the key management personnel of the company or of a parent of the company.

3. Significant accounting policies (continued)

(n) Related parties (continued)

(B) An entity is related to a company if any of the following conditions applies:

(i) The entity and the company are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others).
(ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).
(iii) Both entities are joint ventures of the same third party.
(iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.
(v) The entity is a post-employment benefit plan for the benefit of employees of either the company or an entity related to the company.
(vi) The entity is controlled, or jointly controlled by a person identified in (A).
(vii) A person identified in (A)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).
(viii) The entity, or any member of a group of which it is a part, provides key management personnel services to the company or to the parent of the company.

A related party transaction is a transfer of resources, services or obligations between related parties, regardless of whether a price is charged.

(o) Revenue recognition

Revenue from water sales and drainage services is recognised in surplus or deficit when water is delivered to the customer, drainage services are rendered and the amounts can be reliably measured.

Government subsidy and other funding are recognised when received.

(p) Interest income and expense

Interest income and expense are recognised in surplus or deficit on the accrual basis, using the effective interest method.

4. Cash and cash equivalents

	2018	2017
Cash	112,734	119,779
Bank balances	162,256,832	128,357,202
	$162,369,566	128,476,981

NATIONAL IRRIGATION COMMISSION LIMITED

Notes to the Financial Statements (Continued)
Year ended March 31, 2018

5. Investments

	2018	2017
Loans and receivables		
Resale agreements [see note (i) below]	10,318,478	21,334,226
Available-for-sale		
Units held in NCB Capital Markets CAPFunds	1,349,692	1,349,692
	$11,668,170	22,683,918

(i) Resale agreements include $1,816,408 (2017: $12,937,741) which is being held in escrow on behalf of one (2017: two) former employees who died intestate; and is not available to the company for operational use.

(ii) At the reporting date, the fair value of underlying securities used as collateral for resale agreements was $10,871,980 (2017: $22,471,943).

6. Accounts receivable

	2018	2017
Trade receivables for water sales and drainage charges [note 25(b)(ii)]	138,856,525	141,270,035
Staff loans	11,915,919	10,224,735
Other receivables	43,622,208	23,987,773
	194,394,652	175,482,543
Provision for impairment losses	(70,999,537)	(58,867,477)
	$123,395,115	116,615,066

(i) Provision for impairment losses is in respect of the following:

	2018	2017
Trade receivables	62,674,412	58,867,477
Other receivables	8,325,125	-
	$70,999,537	58,867,477

(ii) The aging of trade receivables at the reporting date was:

	2018		2017	
	Gross	Impairment allowance	Gross	Impairment allowance
Not past due	48,456,698	2,252,494	40,789,068	2,252,494
Past due 1-30 days	25,137,405	4,469,735	31,001,767	4,469,735
Past due 31-60 days	1,888,466	1,286,369	11,257,510	1,286,369
Past due 61-90 days	1,655,744	574,994	2,421,235	574,994
More than 90 days	61,718,212	54,090,820	55,800,455	50,283,885
	$138,856,525	62,674,412	141,270,035	58,867,477

6. Accounts receivable (continued)

(iii) The movement in the allowance for impairment during the year was as follows:

	2018	2017
Balance as at April 1	58,867,477	40,628,382
Amounts written back	(12,532,495)	(11,551,980)
Increase in allowance for impairment	24,664,555	29,791,075
Balance as at March 31	$70,999,537	58,867,477

(iv) Other receivables includes deposits on property, plant and equipment of $18,214,263 (2017: $3,250,103).

7. Long-term receivables

	2018	2017
Refundable utility deposits	2,575,379	2,575,379
Employee loans	18,295,488	14,855,210
	20,870,867	17,430,589
Less: Current portion	(8,432,920)	(9,043,179)
	$12,437,947	8,387,410

Employee loans are for the purchase of motor vehicles and are repayable over 4-8 years. The interest rate on motor vehicle loans is 0%. The loans are remeasured at commercial bank interest rate and are secured by the respective motor vehicles [see note 25(b)(iii)] on which the loans are outstanding.

8. Employee benefits asset

The company sponsors a defined-benefit pension plan for all employees who have satisfied certain minimum service requirements. The benefits are computed at 2% of pensionable salary for each year of membership in the plan and on other increments as determined by the pension plan.

Amounts recognised in the financial statements in respect of this benefit are as follows:

(a) The amounts recognised in the statement of financial position are determined as follows:

	2018	2017
Present value of funded obligation	(1,296,605,000)	(954,686,000)
Fair value of plan assets	1,557,365,000	1,313,495,000
Unrecognised asset due to asset ceiling	(62,473,000)	(200,358,000)
Asset recognised in the statement of financial position	$ 198,287,000	158,451,000

8. Employee benefits asset (continued)

(b) Movement in the amounts recognised in the statement of financial position:

	2018	2017
Balance at beginning of year	158,451,000	153,790,000
Contributions paid	19,355,000	18,576,000
Pension expense recognised in profit or loss	(10,070,000)	(14,774,000)
Remeasurement recognised in other comprehensive income	30,551,000	859,000
Balance at end of year	$198,287,000	158,451,000

(c) Movement in the present value of obligation:

	2018	2017
Balance at beginning of year	954,686,000	980,933,000
Service costs	27,103,000	30,337,000
Interest on obligation	89,276,000	86,706,000
Employees' contributions	23,297,000	20,531,000
Benefits paid	(48,035,000)	(61,720,000)
Annuities purchased	13,220,000	25,883,000
Actuarial losses/(gains) arising from:		
Changes in financial assumptions	354,422,000	(68,561,000)
Experience adjustments	(117,364,000)	(59,423,000)
Balance at end of year	$1,296,605,000	954,686,000

(d) (i) Movement in fair value of plan assets:

	2018	2017
Fair value of plan assets at beginning of year	1,313,495,000	1,134,723,000
Employees' contributions	23,297,000	20,531,000
Employer's contributions	19,355,000	18,576,000
Interest income on plan assets	125,343,000	102,269,000
Benefits paid	(48,035,000)	(61,720,000)
Annuities purchased	13,220,000	25,883,000
Actuarial gains/(losses) arising from:		
Change in financial assumptions	18,851,000	(3,840,000)
Experience adjustments	91,839,000	77,073,000
Fair value of plan assets at end of year	$1,557,365,000	1,313,495,000

8. Employee benefits asset (continued)

(d) (Continued)

(ii) Plan assets consist of the following:

	2018	2017
International equity fund	86,724,000	70,969,000
Global markets fund	29,255,000	35,484,000
Equity fund	373,163,000	260,218,000
Fixed income fund	81,551,000	106,453,000
Mortgage and real estate fund	379,427,000	272,046,000
Money market fund	51,901,000	59,141,000
Foreign currency fund	246,598,000	236,562,000
Adjustments	3,666,000	(1,357,000)
Value of purchased annuities	158,077,000	132,042,000
CPI indexed fund	147,003,000	141,937,000
	$1,557,365,000	1,313,495,000

(e) Expense recognised in profit or loss:

	2018	2017
Current service costs	27,103,000	30,337,000
Interest on obligation	89,276,000	86,706,000
Interest income on plan assets	(125,343,000)	(102,269,000)
Interest on effect of asset ceiling	19,034,000	-
Net pension expense included in staff costs (note 23)	$ 10,070,000	14,774,000

(f) Amounts recognised in other comprehensive income:

	2018	2017
Experience adjustments	(366,122,000)	63,862,000
Change in financial assumptions	335,571,000	(64,721,000)
	$(30,551,000)	(859,000)

(g) As mortality continues to improve, estimates of life expectancy are expected to increase. The effect on the projected employee benefit asset of an increase of one year in the life expectancy is approximately $16.31 million.

(h) Sensitivity analysis on projected employee benefits asset:

The calculation of the projected benefits asset is sensitive to the assumptions used. The table below summarizes how the projected employee benefit obligation measured at the end of the reporting period would have increased/(decreased) as a result of a change in the respective assumptions by one percentage point. In preparing the analyses for each assumption, all others were held constant. The economic assumptions are somewhat linked as they are all related to inflation. Hence, for example, a 1% reduction in the long-term discount rate would cause some reduction in the medical trend rate.

8. Employee benefits asset (continued)

(h) Sensitivity analysis on projected employee benefits asset (continued):

	2018		2017	
	1% Decrease	1% Increase	1% Decrease	1% Increase
	$	$	$	$
Discount rate	175,454,000	(140,693,000)	137,914,000	(108,096,000)
Future salary increases	(44,638,000)	49,788,000	(52,202,000)	59,643
Future pension increases	(108,980,000)	126,531,000	(72,261,000)	83,476,000

(i) Liability duration:

	2018	2017
Active members and all participants	32 years	32 years

(j) The principal actuarial assumptions (expressed as weighted averages) used were as follows:

	2018	2017
Discount rate	7.5%	9.5%
Inflation rate	4.5%	6.5%
Future salary increases	4.5%	6.5%
Future pension increases	2.5%	3.5%

(k) The company expects to pay $43,129,000 in contributions to the plan in 2018/2019 (2017/2018: $31,755,000).

9. Intangible asset

	Computer software	
	2018	2017
Cost	13,049,961	13,049,961
Amortisation		
At beginning of year	7,829,829	6,524,864
Charge for the year	1,304,966	1,304,965
At end of year	9,134,795	7,829,829
Net book value	$ 3,915,166	5,220,132

NATIONAL IRRIGATION COMMISSION LIMITED

Notes to the Financial Statements (Continued)
Year ended March 31, 2018

10. Property, plant and equipment

	Building & leasehold improvements	Utility plant	Furniture, fixtures & equipment	Motor vehicles	Machinery and equipment	Capital work-in-progress	Total
Cost							
March 31, 2016	104,106,303	1,721,088,957	116,432,412	27,762,421	21,096,677	89,200,641	2,079,687,411
Additions	1,733,765	9,801,077	11,780,507	5,169,379	-	3,068,064	31,552,792
March 31, 2017	105,840,068	1,730,890,034	128,212,919	32,931,800	21,096,677	92,268,705	2,111,240,203
Additions	1,315,092	6,581,135	23,070,740	12,102,651	2,634,437	-	45,704,055
Reclassification	-	31,569,350	-	-	-	(31,569,350)	-
Write-off	-	-	-	-	-	(15,890,556)	(15,890,556)
March 31, 2018	107,155,160	1,769,040,519	151,283,659	45,034,451	23,731,114	44,808,799	2,141,053,702
Depreciation							
March 31, 2016	24,485,298	1,195,514,890	89,614,266	23,824,940	5,216,741	-	1,338,656,135
Charge for the year	2,493,261	28,149,054	6,769,670	3,879,009	527,068	-	41,818,062
March 31, 2017	26,978,559	1,223,663,944	96,383,936	27,703,949	5,743,809	-	1,380,474,197
Charge for the year	2,515,180	29,282,946	9,392,473	3,675,208	592,928	-	45,458,735
March 31, 2018	29,493,739	1,252,946,890	105,776,409	31,379,157	6,336,737	-	1,425,932,932
Net book values							
March 31, 2018	$ 77,661,421	516,093,629	45,507,250	13,655,294	17,394,377	44,808,799	715,120,770
March 31, 2017	$ 78,861,509	507,226,090	31,828,983	5,227,851	15,352,868	92,268,705	730,766,006
March 31, 2016	$ 79,621,005	525,574,067	26,818,146	3,937,481	15,879,936	89,200,641	741,031,276

(i) Included in building and leasehold improvements are leasehold improvements with net book value of $44,275,456 (2017: $50,112,827).

(ii) Capital work-in-progress represents internal projects, relating to lining of canals, construction of building and other construction works, funded by the Government of Jamaica, which are undertaken and managed by the company. The cost to complete the projects has not been quantified to date. There are currently no contractual commitments related to completion of these projects, as they are being carried out by the company as, and when, funds become available.

11. Accounts payable and accru..ed charges

	2018	2017
Customer deposits	17,300,737	17,440,093
Trade payables	45,295,640	51,245,304
Accrued vacation leave	42,293,226	35,330,195
Provision for litigation settlement (i)	7,380,272	9,815,810
Education tax payable including interest (ii)	118,594,724	106,681,230
Other accruals (iii)	78,154,230	38,320,876
Other payables (iv)	26,422,254	17,489,456
General Consumption Tax (GCT) payable	5,972,914	35,425,758
	$341,414,000	311,748,722

11. Accounts payable and accrued charges (continued)

(i) The movement in the provision for litigation settlement during the year was as follows:

	2018	2017
Balance as at April 1	9,815,810	3,811,228
Amounts paid	(2,435,538)	(181,972)
Provision recognised	-	6,186,554
Balance as at March 31	$7,380,272	9,815,810

(ii) Education tax payable including interest represents amounts owing to the Tax Administration of Jamaica for the periods 2011 to 2016. During the year, the company accured additional interest of $11,913,494.

(iii) Other accruals includes amounts related to unpaid electricity cost and other operating costs.

(iv) Other payables include $1,816,408 (2017: $12,937,741) received from Sagicor Life Jamaica Limited on behalf of former employees who died intestate; these restricted funds are held in investments [note 5(i)].

12. Government of Jamaica project advances

This balance represents the net unspent portion of funds received from the Government of Jamaica (GOJ) and its agencies for the following projects:

	2018	2017
National Irrigation Development Plan (NIDP)		
- Implementation	42,705,255	42,705,225
Canal lining and other projects	(46,273,006)	28,427,531
Rain Water Harvesting Project	(11,000)	(11,000)
Government of Jamaica (GOJ) Agricultural		
Productivity Projects	26,148,173	38,164,064
Fishing Beach Projects	4,258,785	4,258,785
	$26,828,207	113,544,605

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Notes to the Financial Statements (Continued)
Year ended March 31, 2018

13. Deferred credit

	Balance at March 31, 2016	Movement during the year	Balance at March 31, 2017	Movement during the year	Balance at March 31, 2018
Grant for acquisition of properly, plant and equipment (net of disposals)	294,498,893	-	294,498,893	-	294,498,893
Property, plant and equipment gifted by Agro 21 Corp., net, in 1991	1,198,152	-	1,198,152	-	1,198,152
Property, plant and equipment gifted by Ministry of Agriculture	1,203,061	-	1,203,061	-	1,203,061
Property, plant and equipment transferred from NIDP Project	1,896,725	-	1,896,725	-	1,896,725
Property, plant and equipment, other than utility plant, gifted by district irrigation authorities	3,520,295	-	3,520,295	-	3,520,295
Utility plant acquired under CDB/IDB project and utility plant of previously unrecorded irrigation authorities capitalised during 1991	141,941,917	-	141,941,917	-	141,941,917
Utility plant acquired out of project funds	591,096,098	-	591,096,098	54,518,580	645,614,678
Revaluation surplus on inventories	1,233,211	-	1,233,211	-	1,233,211
Irrigation pipes gifted by Chinese Government	41,993,367	-	41,993,367	-	41,993,367
Computers funded by the NIDP Project	14,546,237	-	14,546,237	-	14,546,237
Global Postioning System (GPS) units funded by the NIDP Project	854,367	-	854,367	-	854,367
Motor vehicle acquired out of NIDP project funds	2,945,000	-	2,945,000	-	2,945,000
Motor vehicle gifted by the Ministry of Agriculture and Fisheries	950,000	-	950,000	-	950,000
Customer Relationship Management System (CRMS) funded by the NIDP	13,049,961	-	13,049,961	-	13,049,961
Expenditure on contracts-in-progress (net of amounts expensed out of GOJ project advances)	33,100,318	-	33,100,318	-	33,100,318
	1,144,027,602	-	1,144,027,602	54,518,580	1,198,546,182
Amortisation transferred to profit or loss	(838,745,668)	(33,899,714)	(872,645,382)	(33,633,383)	(906,278,765)
	$ 305,281,934	(33,899,714)	271,382,220	20,885,197	292,267,417

The net book value of property, plant and equipment, with the cost of which the deferred credit account was increased at the date of acquisition, is eliminated from the deferred credit account on the disposal of the assets.

14. Share capital

	2018	2017
Authorised, issued and fully-paid:		
100 ordinary shares at no par value	$100	100

15. Capital reserve

This represents previously determined revaluation surplus on property, plant and equipment which, on first-time adoption of IFRS, was deemed part of the cost of the utility plant.

NATIONAL IRRIGATION COMMISSION LIMITED

Notes to the Financial Statements (Continued)
Year ended March 31, 2018

16. Investment revaluation reserve

This represents the increase in the fair value of investments classified as available-for-sale.

17. Government of Jamaica subsidy on behalf of farmers

The purpose of this subsidy is to significantly reduce the portion of the cost of providing irrigation water to farmers which would normally be recovered from them as rates. By this means, Government subsidises irrigated agriculture.

In light of the last review conducted by the Office of Utilities Regulation, the management estimated that the subsidy would need to be $1.048 billion (2017: $846.5 million) in order for the Company to deliver irrigation water as required by farmers, in the context of the schemes mentioned in note 1(a). An amount of $1.041 billion (2017: $830.156 million) was approved by Parliament and paid to the Company.

18. Other income

	2018	2017
Amortisation of interest on concessionary loans	1,807,292	1,403,669
Foreign exchange gains on bank balances	3,470	34,085
Insurance claim settlement	4,619,093	196,040
Service fees	1,362,583	2,027,097
Miscellaneous	2,045,901	1,553,114
	$9,838,339	5,214,005

19. Expenses by nature

	2018	2017
Amortisation of intangible asset (note 9)	1,304,966	1,304,965
Advertising and public relations	6,464,476	3,414,199
Advisory committee fees and related expenses	4,075,635	761,450
Bad debts, net of recoveries	12,150,059	18,372,757
Bank charges	1,006,582	1,015,993
Computer expenses	16,513,420	17,752,741
Depreciation (note 10)	45,458,735	41,818,062
Directors' expenses	4,561,762	4,930,115
Electricity	413,597,550	392,264,305
Equipment hireage	2,976,750	5,705,599
Fuel and lubricants	5,041,082	4,549,424
General Consumption Tax (GCT)	(211,139)	34,381,956
General expenses	5,263,483	3,838,434
Haulage	2,873,462	2,331,250
Balance carried forward	521,076,823	532,441,250

19. Expenses by nature (continued)

	2018	2017
Balance brought forward from page 31	521,076,823	532,441,250
Insurance	11,846,493	10,394,444
Interest and penalties	11,913,494	827,287
Interest on concessionary loans	4,669,314	1,134,231
Maintenance of conveyance system (labour)	111,154,992	103,109,475
Motor vehicle fuel, repairs and maintenance	20,723,114	18,997,459
Office maintenance, rental and property taxes	9,289,631	8,731,745
Office refreshments	4,632,229	4,152,039
Office utilities	14,107,098	11,254,954
Other expenses	183,812	265,516
Professional fees	19,623,257	23,517,822
Regulatory fees	480,000	345,000
Repairs to buildings, distribution canals, pipelines and pumps	85,381,709	63,667,491
Salaries, wages and related costs (note 23)	665,337,121	640,810,214
Security	22,284,784	18,111,906
Special projects expenses	20,343,756	1,591,491
Stationery	5,944,344	4,384,835
Subscriptions and donations	862,070	302,037
Telephone, postage, data, etc.	13,865,484	11,233,496
	$1,543,719,525	1,455,272,692
Presented as follows:		
Cost of producing water distributing it to farms	1,159,134,589	1,077,282,182
Adminstrative expenses	384,584,936	377,990,510
	$1,543,719,525	1,455,272,692

20. Net finance income

	2018	2017
Finance income:		
Investments and cash and cash equivalents	204,953	356,764
Other	356,400	365,863
Interest on bank overdraft	(3,200)	-
	$558,153	722,627

21. Taxation

(a) The provision for income tax is computed at 33⅓% of the results for the year, as adjusted for tax purposes, and is made up as follows:

	2018	2017
(i) Current tax charge:		
Provision for charge on current year's profits, being actual tax charge recognised	$13,993,929	-

21. Taxation (continued)

(b) The actual taxation charge differs from the theoretical tax charge for the year as follows:

The effective tax rate for 2018 was 20.41% (2017: Nil%) of pre-tax surplus compared to the statutory rate of 33⅓% (2017: 33⅓%).

	2018	2017
Surplus before taxation	$68,559,698	2,365,609
Computed "expected" tax charge	22,853,233	788,536
Tax effect of treating items differently for financial statements and tax reporting purposes -		
Depreciation, amortisation and capital allowances	8,418,211	9,090,818
Foreign exchange gain, capital	(1,157)	(11,362)
Amortisation of deferred credits	(11,211,128)	(11,299,905)
Expenses not allowed for tax purposes	3,762,181	417,702
Interest on concessionary loans	954,007	(89,813)
Tax losses	(13,993,929)	3,155,172
Other	3,212,511	(2,051,148)
Actual tax charge recognised	$13,993,929	-

(c) At March 31, 2018, taxation losses amounting to approximately $213,937,000 (2017: $257,000,000) are available for set-off against future taxable profits, subject to agreement by the Commissioner General, Tax Administration Jamaica. As at January 1, 2014, tax losses may be carried forward indefinitely; however, the amount that can be utilised in any one year is restricted to 50% of the taxable profits for that year.

(d) Deferred tax asset of approximately $47,950,000 (2017: $57,740,000) in respect of taxation losses and temporary differences has not been recognised in the financial statements, due to the uncertainty that future profits will be generated within the foreseeable future against which the asset can be realised.

22. Surplus for the year

The following are among the items charged in arriving at surplus for the year:

	2018 $	2017 $
Directors' emoluments		
Fees	1,725,447	1,529,850
Travelling	1,301,733	1,638,404
Other expenses	1,534,582	1,761,861
Auditors' remuneration	5,950,000	5,700,000

23. Employee numbers and costs

The average number of persons employed by the company during the year was as follows:

	2018	2017
Full-time	146	153
Part-time	12	31
Other	46	18
	221	202

The aggregate payroll costs for these persons were as follows:

	2018	2017
Salaries	424,731,399	419,396,632
Statutory payroll contributions	32,855,773	37,494,634
Pension benefit cost [note 8(e)]	10,070,000	14,774,000
Travel and subsistence	134,495,118	129,310,921
Gratuities	6,813,348	2,233,956
Training	6,496,310	3,582,683
Accrued vacation leave	6,963,032	(620,854)
Insurance scheme	35,691,220	31,496,473
Staff welfare	7,220,921	3,141,769
	$665,337,121	640,810,214

24. Related party balances and transactions

Identity of related parties:

(a) The company has a related party relationship with its associates and key management personnel, comprising directors and certain senior executives.

(b) The statement of financial position includes balances, arising in the ordinary course of business, with related parties as follows:

	2018	2017
	$	$
Accounts receivable:		
Directors	1,376,271	1,275,321
Long-term receivables:		
Employee loans - key management personnel	667,236	756,250

24. Related party balances and transactions (continued)

(c) The statement of profit or loss and other comprehensive income includes transactions with key management personnel in the ordinary course of business, as follows:

	2018	2017
	$	$
Compensation paid to other key management personnel:		
Salaries to other key management personnel	27,923,887	29,922,002
Post-employment benefits	434,000	683,000
	28,357,887	30,605,002
Interest income from key management personnel	65,273	62,427

25. Financial risk management

(a) Overview:

The company has exposure to the following risks from its use of financial instruments and its operations:

- Credit risk
- Liquidity risk
- Market risk
- Operational risk

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

The Board of Directors has overall responsibility for the establishment and oversight of the company's risk management framework. The Board has established the Audit and Risk Management Committee, which is responsible for developing and monitoring the company's risk management policies. The committee reports bi-monthly to the Board of Directors on its activities.

The company's risk management policies are established to identify and analyse the risks faced by the company, to set appropriate risk limits and controls and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the company's activities. The company, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

The Audit and Risk Management Committee oversees management's monitoring of compliance with the company's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the company. The Audit and Risk Management Committee is assisted in its oversight role by Internal Audit. Internal Audit undertakes both regular and *ad hoc* reviews of risk management controls and procedures, the results of which are reported to the Audit and Risk Management Committee.

25. Financial risk management (continued)

(b) Credit risk:

Credit risk is the risk of financial loss to the company, if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from cash and cash equivalents, resale agreements, trade receivables and long-term motor vehicle loans to employees.

(i) Cash and cash equivalents and investments

Cash and cash equivalents and investments are held with financial institutions which the company regards as strong.

The company limits its exposure to credit risk by investing only in liquid securities that are backed by the Government of Jamaica through established counterparties that are licensed under the Financial Institutions Act and registered with the Financial Services Commission. Consequently, management does not expect any counterparties to fail to meet their obligations. Collateral is held for resale agreements.

(ii) Trade receivables

The company's exposure to credit risk is influenced mainly by the individual characteristics of each customer. The company has a policy under which each customer is analysed before being contracted for the supply of services. Contracted customers are required to make a refundable security deposit that is based on three months projected consumption with regard to the customer's holdings. Customers that fail to meet the company's benchmark for the supply of services may transact with the company on a prepayment basis.

Credit risk is concentrated in the ten largest customers who hold more than 50 percent of the company's trade receivables.

The Director of Commercial Operations has overall responsibility for ensuring the timely collection of outstanding receivables. The Commercial Department reports on the status of collections and receivables to the Finance and Performance Management Committee monthly.

Allowances for impairment

The company establishes an allowance for impairment that represents its estimate of incurred losses in respect of trade receivables based on pre-determined criteria. The main component of this allowance is a specific loss component that relates to individual exposures.

The allowance account in respect of trade receivables is used to record impairment losses, unless the company is satisfied that no recovery of the amount owing is possible; at that point, management obtains permission from the Minister of Agriculture and Fisheries to write off the amounts against the receivable balance directly.

25. Financial risk management (continued)

(b) Credit risk (continued):

(ii) Trade receivables (continued)

Exposure to credit risk

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

	Carrying amount	
	2018	2017
St. Thomas	2,886,428	3,007,437
St. Catherine	77,999,942	79,138,096
Clarendon	25,826,855	23,323,787
St. Elizabeth	28,576,690	32,404,226
Trelawny	2,915,726	2,871,256
St. James	650,884	525,233
	$138,856,525	141,270,035

(iii) Long-term receivable

The company grants loans to its employees to facilitate the purchase of motor vehicles. Loans are repayable over a period of 4-8 years; however, the repayment period may not exceed the expected remaining years to retirement of individual employees. Management does not expect any counterparty to fail to meet his/her obligations.

Collateral held against financial assets

Loans granted are secured by the registration of a lien on the motor vehicles acquired as well as a bill of sale. Estimates of the fair values are based on the sum insured of the collateral, at each reporting date. The fair value of these collateral as at March 31, 2018 was $156,649,202 (2017: $161,609,000).

There has been no change to the company's exposure to credit risk or the manner in which it measures and manages this risk.

(c) Liquidity risk:

Liquidity risk is the risk that the company will not be able to meet its financial obligations as they fall due. The company's approach to managing liquidity is to ensure, as far as possible, that it 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 company's reputation.

Typically, the company ensures that it has sufficient cash on demand to meet expected operational expenses.

25. Financial risk management (continued)

(c) Liquidity risk (continued):

The contractual outflow for accounts payable and accrued charges is represented by its carrying amount and may require settlement within 12 months of the reporting date. Government of Jamaica project advances represents the amounts remaining from Government grants and multilateral financing received to finance the company's capital budget as well as to undertake specific NIDP projects. Funds are received from the Government and multilateral agencies based on an approved budget.

There has been no change to the company's exposure to liquidity risk or the manner in which it measures and manages the risk.

(d) Market risk:

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates, will affect the company's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return on risk.

(i) Currency risk

The company is exposed to currency risk on purchases and borrowings that are denominated in a currency other than the functional currency of the company, primarily, the United States Dollar (US$). The company's net exposure at reporting date was:

	2018 US$	2017 US$
Cash and cash equivalents	5,459	5,301

The average exchange rate for the US dollar in terms of Jamaica dollars, at March 31, 2018 was: US$1.00 = J$125.19 (2017: J$128.22).

Sensitivity analysis

A 4% (2017: 6%) strengthening of the US$ against the Jamaica dollar would have increased profit by $27,336 (2017: $40,782). A 2% (2017: 1%) weakening would have decreased profit by $13,668 (2017: $6,797). This analysis assumes that all other variables, in particular, interest rates, remain constant. The analysis is performed on the same basis as for 2017.

(ii) Interest rate risk

Interest rate risk is the risk that the value of a financial instrument will fluctuate due to changes in market interest rates.

25. Financial risk management (continued)

(d) Market risk (continued):

(ii) Interest rate risk (continued)

Profile

At the reporting date, the interest rate profile of the company's interest-bearing financial instruments were at fixed rate and are carried at cost as follows:

	Carrying amount	
	2018	2017
Resale agreements	10,318,478	21,289,226
Employee loans	11,915,919	10,224,734
	$22,234,397	31,513,960

All the company's interest-bearing financial instruments are carried at fixed rates and are not fair valued; therefore a change in interest rate will not affect the carrying value if the financial intsruments or the company's cashflows.

There has been no change to the company's exposure to market risk or the manner in which it measures and manages this risk.

(e) Operational risk:

Operational risk is the risk of direct or indirect loss arising from a wide variety of causes associated with the company's processes, personnel, technology and infrastructure, and from external factors other than credit, market and liquidity risks such as those arising from legal and regulatory requirements and generally accepted standards of corporate behaviour. Operational risks arise from all of the company's operations.

The company's objective is to manage operational risk so as to balance the avoidance of financial losses and damage to the company's reputation with overall cost effectiveness and to avoid control procedures that restrict initiative and creativity.

The primary responsibility for the development and implementation of controls to address operational risk is assigned to senior management. This responsibility is supported by the development of overall company standards for the management of operational risk, including the following:

- requirements for appropriate segregation of duties, including the independent authorisation of transactions;
- requirements for the reconciliation and monitoring of transactions;
- compliance with regulatory and other legal requirements;
- training and professional development;
- ethical and business standards; and
- risk mitigation, including insurance where this is effective.

25. Financial risk management (continued)

(e) Operational risk (continued):

Compliance with the company's standards is supported by a programme of periodic reviews undertaken by the internal audit unit. The results of internal audit reviews are discussed with management, with summaries submitted to the Board of Directors, the Audit Committee and senior management of the company, and action is taken to deal with the matters reported.

There has been no change to the company's exposure to operational risk or the manner in which it measures and manages this risk.

(f) Capital management:

The company is not subject to any externally imposed capital requirements.

It is the Board's policy to maintain a strong capital base so as to sustain the future operation of the company. The Board of Directors monitors the return on capital, which the company defines as total equity.

26. Fair values

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Market price is used to determine fair value where an active market exists as it is the best evidence of the fair value of a financial instrument.

Determination of fair value and fair value hierarchy

IFRS specifies a hierarchy of valuation techniques based on whether the inputs to those valuation techniques are observable or unobservable. The different levels have been defined as follows:

Level 1 – Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2 – Discounted cash flow technique using a discount rate from observable market data, i.e. average of several brokers/dealers market indicative yields in active markets for identical assets or liabilities.

Level 3 – Valuation techniques using significant unobservable inputs.

The fair values of cash and cash equivalents, accounts receivable and accounts payable are assumed to approximate to their carrying values, due to their short-term nature.

The fair value of long-term receivable approximates to its carrying value as no discount is expected on settlement.

The fair values of resale agreements included in investments approximate their carrying values due to their short-term nature. The units held in NCB Capital Markets CAPFunds (note 5) are classified as Level 2 in the fair value hierarchy.

27. Contingent liabilities

(a) There are a number of claims against the company by various third parties. The claims are at different stages and appropriate provision are made in these financial statements when management believes that the company will be unsuccessful in its defence.

(b) A claim was made against the company by an ex-employee in which the court awarded cost to the ex-employee. An amount of $3,784,256 (2017: $3,784,256) is included in accounts payable (note 11) pending any claims.

28. Capital commitments

Commitments for capital expenditure were as follows:

	2018	2017
Capital commitments	$6,500,000	72,591,298

29. Prior year adjustments

(a) In the previous years, the company did not account for the employer's portion of education tax which became due and payable on the amendment of section 7(i) of the Education Tax Act (2003). The amounts due as of March 31, 2011 and subsequent years, including interest of $93.35M have now been recognised.

(b) In the previous years, the company accounted for its payment of input tax for General Consumption Tax purposes on the cash basis. On a monthly basis, the company would accumulate its charges for input tax and submit the information to its responsible Ministry, which would make the payments; these were accounted for as part of its subvention. During the prior financial year, the responsible Ministry redirected this responsibility to the company to pay its input tax. At the reporting date, the company applied the accruals basis in accounting for this liability. This resulted in an accrual of $35.42M as at March 31, 2017, of which $8.44M relates to prior years, and was appropriately recognised in the financial statements.

NATIONAL IRRIGATION COMMISSION LIMITED

SUPPLEMENTARY INFORMATION TO THE FINANCIAL STATEMENTS

YEAR ENDED MARCH 31, 2018

NATIONAL IRRIGATION COMMISSION LIMITED

Government of Jamaica Project Advances
As at and for year ended March 31, 2018

PROJECTS	At beginning of year	Received during year	Total	Capital work	Expenditure capitalised	Non-capital expenditure	Capital 'B' expenditure	Capital funds utilised for deposits on property, plant and equipment	2018	2017
Non Such Agro Park, St. Mary (Account #454120-00-00)	1,670,635	-	1,670,635	(2,314,512)	-	-	-	-	(643,877)	(643,877)
Construction of Dam	14,143,538	-	14,143,538	(50,000)	(14,022,668)	(30,245)	-	-	40,625	40,625
Hounslow	2,198,189	-	2,198,189	-	-	(2,198,189)	-	-	-	-
Lining of Canals	413,175,055	150,000,000	563,175,055	(23,143,495)	(164,492,610)	(388,809,945)	-	(33,002,012)	(46,273,007)	40,296,153
National Irrigation Development Plan	1,651,435,748	-	1,651,435,748	-	-	-	(1,608,245,522)	-	43,190,226	43,190,226
National Irrigation Development Plan - Implementation	448,435,563	-	448,435,563	-	-	-	(448,920,563)	-	(485,000)	(485,000)
IDB Well sites	485,000	-	485,000	-	-	-	-	-	485,000	485,000
Other capital projects	254,444,544	-	254,444,544	-	(187,221,888)	(40,805,819)	-	-	26,416,837	26,416,837
Agro. Parks Projects	30,000,000	-	30,000,000	(39,567,158)	-	(4,111,330)	-	-	(13,678,488)	(13,678,488)
Joint Venture- New-Era rehab infrastructure	2,701,354	-	2,701,354	-	-	(528,773)	-	-	2,172,581	2,172,581
Ext. Block E Pipeline	2,639,774	-	2,639,774	-	(2,547,798)	-	-	-	91,976	91,976
Rain Water - Harvesting Project	12,896,074	-	12,896,074	-	-	(12,907,074)	-	-	(11,000)	(11,000)
Energy Saving Projects	6,042,125	-	6,042,125	-	-	(8,006,974)	-	-	(1,964,849)	(1,964,849)
Vernamfield Irrigation-System Project Phase 1	65,700,000	-	65,700,000	(13,065,725)	-	(44,284,849)	-	-	8,349,426	8,374,426
Fishing Beach Projects	70,000,000	-	70,000,000	-	-	(65,741,215)	-	-	4,258,785	4,258,785
Port Henderson re Lift Pump - Station-STU	6,500,000	-	6,500,000	(6,104,837)	-	-	-	-	395,163	448,826
PGR Pump House Construction-STU	2,090,000	-	2,090,000	(2,231,820)	-	-	-	-	(141,820)	(141,820)
Ebony Park filtration system-STU	3,403,532	-	3,403,532	(3,345,820)	-	-	-	-	57,712	126,288
Wind Monitoring Project	5,174,718	-	5,174,718	-	-	(5,213,557)	-	-	(38,839)	(38,839)
Vernam Irrigation System Phase 2	4,400,000	-	4,400,000	(560,000)	-	-	-	-	3,840,000	3,840,000
JBI Project Funds-Schwallenburgh Green House	2,431,128	-	2,431,128	(1,664,372)	-	-	-	-	766,756	766,755
	$2,999,966,977	150,000,000	3,149,966,977	(92,047,739)	(368,284,964)	(572,637,970)	(2,057,166,085)	(33,002,012)	26,828,207	113,544,605

NATIONAL IRRIGATION COMMISSION LIMITED

Expenses
Year ended March 31, 2018

Cost of producing and distributing water to farm gates

	2018	2017
Depreciation	45,458,735	41,818,062
Electricity	413,597,550	392,264,305
Equipment hireage	2,976,750	5,708,599
Fuel and lubricants	5,041,082	4,549,424
General expenses	5,263,483	3,842,215
General insurance	6,294,835	8,432,689
Haulage	2,873,462	2,331,250
Maintenance of conveyance system (labour)	111,154,992	103,109,475
Motor vehicle fuel, repairs and maintenance	19,942,545	15,064,075
Telephone, postage, data, etc.	4,002,291	3,198,337
Office refreshments	2,964,023	2,474,862
Stationery	2,596,371	2,059,003
Computer expenses	1,021,448	1,670,856
Bank charges	121,720	131,438
Regulatory fees	480,000	345,000
Office rent and property taxes	1,463,000	1,483,000
Office utilities	8,286,814	6,916,909
Advisory committee fees and related expenses	4,075,635	761,450
Professional fees	2,499,527	1,314,583
Repairs to buildings, distribution canals, pipelines, pumps, etc. (material)	85,381,709	63,667,491
Salaries, wages and related costs (see below)	410,769,515	405,510,994
Security	22,869,102	10,628,165
Total cost of producing and distributing water	$1,159,134,589	1,077,282,182

Salaries, wages and related costs

	2018	2017
Personnel emoluments	258,389,366	272,837,174
Insurance scheme	26,285,067	22,898,166
Statutory contributions	19,928,678	12,662,715
Staff welfare	4,488,115	2,045,424
Accrued vacation leave	4,331,978	1,252,279
Travel and subsistence	94,518,380	92,694,564
Training	2,827,931	1,120,672
	$ 410,769,515	405,510,994

NATIONAL IRRIGATION COMMISSION LIMITED

Expenses (Continued)
Year ended March 31, 2018

Salaries, wages and related costs included in administrative expenses

	2018	2017
Personnel emoluments	166,342,032	146,559,458
Pension benefit cost (net of contribution)	10,070,000	14,774,000
Insurance scheme	9,406,155	8,598,307
Statutory contributions	12,927,095	24,831,919
Vacation leave	2,631,054	(1,873,133)
Gratuities	4,581,764	2,233,956
Staff welfare	2,732,807	1,096,345
Training	3,668,379	2,462,011
Travel and subsistence	39,976,738	36,616,357
	$253,336,024	235,299,220

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