



Operation Number: **BH-L1028**  
Year- PMR Cycle: **Second period Jan-Dec 2015**  
Last Update: **3/22/2016**  
PMR Validation Stage: **Validated by Representative**

Chief of Operations validation date: **03/30/2016**  
Division Chief validation date: **04/01/2016**  
Country Representative validation date: **04/04/2016**

Inter-American Development Bank - IDB  
Office of Strategic Planning and Development Effectiveness

## Operation Profile

### Basic Data

Operation name:	WSC Support Program - New Providence Water Supply and Sanitation Systems Upgrade	Loan Number:	2624/OC-BH
Executing Agency (EA):	WATER AND SEWERAGE CORPORATION / MINISTRY OF WORKS		
Team Leader:	Mellinger, Yvon	Sector/Subsector:	AS
Operation Type:	Loan Operation	Overall Stage:	Disbursing (From eligibility until all the loans are closed).
Lending Instrument:	Investment Loan	Country:	BAHAMAS
Borrower:	WATER AND SEWERAGE CORPORATION / MINISTRY OF WORKS		Convergence related Operation(s):

### Total Cost and Source

	Original IDB	Current Active IDB	Local Counterpart	Co-Financing/Country	Total operation cost - Original Estimate
BH-L1028	\$81,000,000.00	\$81,000,000.00	\$0.00	\$0.00	\$81,000,000.00

### Available Funds (US\$)

	Current IDB	Disb. Amount to Date	% Disbursed	Undisbursed Balance
BH-L1028	\$81,000,000.00	\$56,746,324.37	70.06%	\$24,253,675.63

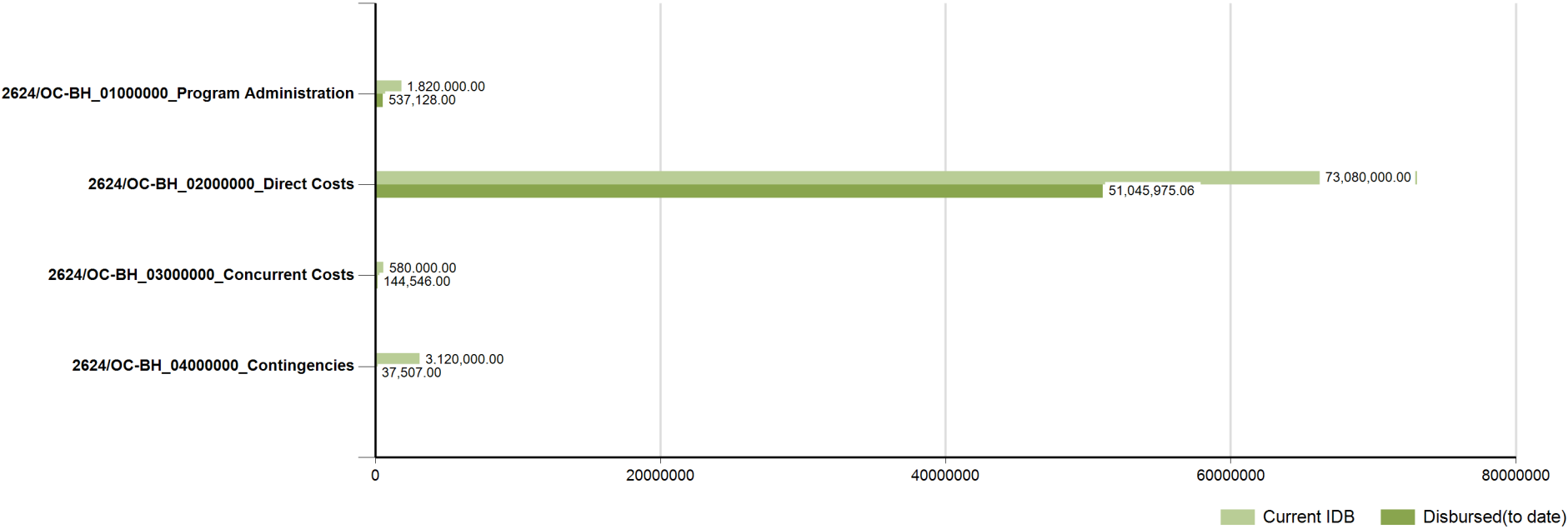
### Environmental and Social Safeguards

Main Operation	
Impacts Category:	B
Safeguard Performance Rating:	
Safeguard Performance Rating - Rationale:	

### Reformulation Information

Main Operation	
Was/Were the objective(s) of this operation reformulated?	NO
Date of approval:	

Expense Categories by Loan Contract (cumulative values)



Results Matrix

Impacts

Impact:	1 A Financially viable Water and Sewerage Corporation (WSC).
Observation:	The WSC and GOBH are committed to achieving the Project objectives

Indicators	Flags*	Unit of Measure	Baseline	Baseline Year	Means of verification	Observations	2012	2013	2014	2015	2016	2017	2018
1.1 Water and Sewerage Corporation (WSC) operating cost recovery (Revenues Collected/Operating Cost)		%	61.00	2011	WSC Annual Audited Financial Statements	% as proportion of Revenue collected/operating Cost	P	61.00	65.00	70.00	75.00	80.00	
							P(a)	61.00	65.00	70.00	75.00	80.00	
							A	60.00	56.00	60.00	68.00		
1.2 Increase in number of active (water) connections		Connections	60,099.00	2011	This indicator will be measured through WSC commercial registry. Baseline has been updated to 2010.	Through project activities, number of active connection is expected to increase substantially, which will be instrumental in reaching this Country Strategy indicator.	P	1,000.00	2,000.00	2,000.00	2,000.00	2,000.00	
							P(a)	1,000.00	2,000.00	2,000.00	2,500.00	1,500.00	2,500.00
							A	1,375.00	1,523.00	500.00	692.00		

Impact:	2 Establishment of an economic and environmental regulator to regulate the activities of the Water and Sewerage Corporation (WSC)
Observation:	At the start of the project, the GOBH is committed and ready to make important steps in the right direction, as confirmed by the project conditions prior

Indicators	Flags*	Unit of Measure	Baseline	Baseline Year	Means of verification	Observations	2012	2013	2014	2015	2016	2017	2018
2.1 Regulatory functions are separated from the provision of services		Law approved	0.00	2011	Law promulgated.	Economic regulation is separated from WSC.	P	0.00	0.00	1.00	0.00	0.00	
							P(a)	0.00	0.00	1.00	0.00	0.00	1.00
							A			0.00	0.00		

 RF - RF Indicator  SI - Sector Indicator  CI - Country Indicator  PG - Pro-Gender  PE - Pro-Ethnicity

Outcomes

Outcome:	1 Non Revenue Water (NRW) reduced
Observation:	Volume of NRW is calculated as yearly average, this important indicator is showing better results than those envisaged initially.

Indicators	Flags*	Unit of Measure	Baseline	Baseline Year	Means of verification	Observations	2012	2013	2014	2015	2016	2017	2018	EOP
1.1 Volume of Non Revenue Water NRW (average daily volume)		Million Imperial Gallons	6.87	2012	WSC approved water balance from contractor report		P	5.30	4.70	4.00	3.30	2.50		2.50
							P(a)	5.30	6.00	5.50	4.30	2.80	2.50	2.25
							A	6.50	6.49	4.53	3.05			

[illegible]

EOP
1.00
1.00

[illegible]

Outcome:	2 Water and Sewerage Corporation (WSC) strengthened
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**Observation:**

	Indicators	Flags*	Unit of Measure	Baseline	Baseline Year	Means of verification	Observations		2012	2013	2014	2015	2016	2017	2018	EOP
2.1 Annual amount spent on staff overtime			US\$	109,000.00	2011	WSC HR report	SCADA will eliminate need for staff to visit stations/facilities outside normal working hours, and improve response to failures	P	109,000.00	103,550.00	98,100.00	87,200.00	81,750.00			81,750.00
	P(a)	109,000.00						105,000.00	98,100.00	87,200.00	81,750.00	75,000.00	75,000.00	75,000.00		
	A	113,107.00						112,421.00	98,750.00	79,650.00						
2.2 Win-back customers (households reconnected)		Households	0.00	2011	WSC commercial report		P	0.00	0.00	0.00	500.00	1,500.00			2,000.00	
	P(a)						0.00	0.00	0.00		500.00	1,000.00	500.00	2,000.00		
	A								0.00	0.00						
2.3 Large commercial customers billed in accordance to metered consumption		%	84.00	2011	WSC Commercial Report		P	84.00	90.00	95.00	98.00	98.00			98.00	
	P(a)						84.00	85.00	90.00	95.00	95.00	98.00	98.00	98.00		
	A						87.00	85.00	93.00	89.00						

<b>Outcome:</b>	3 Wastewater treatment plants are upgraded and wastewater treatment action plan prepared
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Observation:	Waste water action Plan not yet finalized.
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3.3 Households with treated wastewater			Households	62,491.00	2011	WSC semi annual report, Consultant's Reports.	The baseline and projections have been estimated assuming that only 36% of the volume of water treated by wastewater treatment plants corresponds to households (the balance corresponds to commercial connections). The information will be confirmed and validated once the Waste water Master Plan is completed. In addition, the baseline includes households with septic tanks (i.e. primary treatment).	P								
							P(a)			1,073.00	62,491.00	64,000.00	65,500.00	67,000.00	67,000.00	
							A			62,491.00	62,491.00					
Outcome:	4 Legal and regulatory framework upgraded															
Observation:	Draft legislation under review.															

Indicators	Flags*	Unit of Measure	Baseline	Baseline Year	Means of verification	Observations									
							2012	2013	2014	2015	2016	2017	2018	EOP	
4.1 Water and Sewerage Corporation (WSC) licence from economic regulator		Licence	0.00	2011	License issued		P	0.00	0.00	0.00	1.00	0.00			1.00
	P(a)						0.00	0.00	0.00		0.00	1.00		1.00	
	A								0.00	0.00					
4.2 Water and Sewerage Corporation (WSC) licence from environmental regulator		Licence	0.00	2011	Licence issued		P	0.00	0.00	0.00	1.00	0.00			1.00
	P(a)						0.00	0.00	0.00		0.00	1.00		1.00	
	A								0.00	0.00					

 RF - RF Indicator

 SI - Sector Indicator

 CI - Country Indicator

 PG - Pro-Gender

 PE - Pro-Ethnicity



## Outputs: Annual Physical and Financial Progress

Non Revenue Water (NRW) Reduced		Physical Progress			Financial Progress		
Outputs	Unit of Measure		2015	EOP		2015	EOP
Non Revenue Water strategy developed (including baseline study)	Strategy	P		1.00	P		3,000,000.00
		P(a)		1.00	P(a)		3,000,000.00
		A		1.00	A		3,000,000.00
Service connections replaced, maintained or disconnected	Connections	P	7,000.00	23,000.00	P	4,200,000.00	13,500,000.00
		P(a)	4,149.00	23,000.00	P(a)	2,000,000.00	13,500,000.00
		A	4,856.00	19,558.00	A	2,724,295.00	13,500,000.00
Leaks detected and repaired	Leaks	P	2,000.00	6,000.00	P	7,600,000.00	30,000,000.00
		P(a)	1,419.00	6,000.00	P(a)	9,500,000.00	30,000,000.00
		A	1,210.00	4,372.00	A	10,815,216.00	30,000,000.00
Non Revenue Water (NRW) asset management information system developed	System	P		1.00	P		2,000,000.00
		P(a)		1.00	P(a)		2,000,000.00
		A		1.00	A		2,000,000.00
Training workshops on Non Revenue Water (NRW) management	workshops	P		10.00	P	100,000.00	500,000.00
		P(a)	0.00	10.00	P(a)		500,000.00
		A	0.00	2.00	A	300,000.00	500,000.00
Water and Sewerage Corporation (WSC) Strengthened		Physical Progress			Financial Progress		
Outputs	Unit of Measure		2015	EOP		2015	EOP
Supervisory Control And Data Acquisition (SCADA) system purchased and installed	System	P		1.00	P		1,000,000.00
		P(a)		0.00	P(a)		1,000,000.00
		A		1.00	A		1,000,000.00
Automated meters reading/intelligence system for large commercial customers installed	System	P		3,000.00	P		500,000.00
		P(a)	3,000.00	3,000.00	P(a)	500,000.00	500,000.00
		A	0.00	0.00	A	0.00	0.00
Public relations campaign for project and customer win-back campaign implemented	Campaign	P	1.00	2.00	P	300,000.00	1,500,000.00
		P(a)		1.00	P(a)	500,000.00	1,500,000.00
		A	0.00	0.00	A	494,336.00	713,366.00
New organizational structure implemented (including staff training)	Structure	P	1.00	1.00	P	400,000.00	2,000,000.00
		P(a)		1.00	P(a)	600,000.00	2,000,000.00
		A	0.00	0.00	A	251,072.00	747,209.00
Tariff study for economic regulation prepared	Study	P		1.00	P		500,000.00
		P(a)	1.00	1.00	P(a)	250,000.00	500,000.00
		A	0.00	0.00	A	220,455.00	220,455.00
Wastewater treatment plants upgraded and wastewater treatment action plan prepared		Physical Progress			Financial Progress		
Outputs	Unit of Measure		2015	EOP		2015	EOP
Lift stations rehabilitated/upgraded	Lift stations	P	20.00	60.00	P	315,000.00	950,000.00
		P(a)	15.00	13.00	P(a)	200,000.00	950,000.00
		A	0.00	0.00	A	0.00	0.00
Collection systems and force mains rehabilitated/installed	Miles	P	1.00	4.00	P	1,000,000.00	3,850,000.00
		P(a)		1.00	P(a)	500,000.00	3,555,575.00
		A	0.00	0.00	A	0.00	0.00
Wastewater master plan for New Providence prepared	Plan	P		1.00	P		780,000.00
		P(a)	1.00	1.00	P(a)	216,067.00	1,074,425.00
		A	1.00	1.00	A	359,533.00	923,466.00
Wastewater infrastructure (treatment plants and disposal wells) rehabilitated or constructed	Infrastructure	P	2.00	9.00	P	2,500,000.00	10,000,000.00
		P(a)	0.00	5.00	P(a)	0.00	10,000,000.00
		A	0.00	0.00	A	0.00	0.00

Legal and regulatory framework upgraded		Physical Progress			Financial Progress		
Outputs	Unit of Measure	2015		EOP	2015		EOP
Draft legislation presented	Legislation	P		2.00	P		250,000.00
		P(a)		2.00	P(a)	217,500.00	250,000.00
		A		2.00	A	0.00	12,472.00
Regulators established	Regulators	P		2.00	P	1,150,000.00	2,750,000.00
		P(a)	0.00	2.00	P(a)	250,000.00	2,750,000.00
		A	0.00	0.00	A	0.00	0.00
Management, contingencies and others							

Other Cost		2015	Cost
Engineering and supervisory services	P	\$400,000.00	\$1,820,000.00
	P(a)	\$500,000.00	\$1,820,000.00
	A	\$125,044.00	\$555,794.00
Audits	P	\$24,000.00	\$120,000.00
	P(a)	\$7,500.00	\$56,424.00
	A	\$8,509.00	\$23,424.00
Monitoring and Evaluation	P	\$22,000.00	\$460,000.00
	P(a)		\$176,179.00
	A	\$0.00	\$129,631.00
Contingencies	P	\$1,040,000.00	\$3,120,000.00
	P(a)	\$1,005,000.00	\$3,120,000.00
	A	\$0.00	\$0.00
Financial charges	P	\$480,000.00	\$2,400,000.00
	P(a)	\$500,000.00	\$2,747,397.00
	A	\$591,263.00	\$1,247,397.00
Total Cost		2015	Total Cost
	P	\$19,531,000.00	\$81,000,000.00
	P(a)	\$16,746,067.00	\$81,000,000.00
	A	\$15,889,723.00	\$54,573,214.00

## Changes to the Matrix

Section	Name	Type of Change	Reasons	Entered in the System	Agreed with Executing Agency
Output	Wastewater master plan for New Providence prepared	Modify Financial P(a) value	Contract closing allows for the adjustment of the initial budget to the real value.	2/25/2016	2/24/2016
Output	Collection systems and force mains rehabilitated/installed	Modify Financial P(a) value	Master Plan results and definition of final scope allows for a better appreciation of the budget for this output.	2/25/2016	2/24/2016
Output	Wastewater infrastructure (treatment plants and disposal wells) rehabilitated or constructed	Modify Physical P(a) value	Number of Structures adjusted (Reduction from 9 to 5) in function of the newly produced Wastewater Master Plan for New Providence, and the agreed scope for the rehabilitation program.	2/25/2016	2/24/2016
Output	Collection systems and force mains rehabilitated/installed	Modify Physical P(a) value	Number of Structures adjusted (Reduction from 4 to 1) in function of the newly produced Wastewater Master Plan for New Providence, and the agreed scope for the rehabilitation program.	2/25/2016	2/24/2016
Output	Lift stations rehabilitated/upgraded	Modify Physical P(a) value	Number of Structures adjusted (Reduction from 60 to 13) in function of the newly produced Wastewater Master Plan for New Providence, and the agreed scope for the rehabilitation program.	2/25/2016	2/24/2016
Output	Supervisory Control And Data Acquisition (SCADA) system purchased and installed	Modify Physical P(a) value	No modification actually applied: this output was delivered prior to the date indicated initially, hence P(a) ended-up being at zero (Situation that has not changed).	2/25/2016	2/24/2016
Outcome	Households with treated wastewater	Modify EOP P(a)	rounding-up of the target indicator resulting from the finalization of the master Plan for WW and of the scope of the rehabilitation activities.	2/25/2016	2/24/2016

Outcome	Annual amount spent on staff overtime	Modify EOP P(a)	Improved forecast of results from SCADA installation allows for an increase reduction in the number of hours of staff overtime, and for the corresponding reduction in the annual amount spent on staff overtime.	2/24/2016	2/24/2016
Outcome	Volume of Non Revenue Water NRW (average daily volume)	Modify EOP P(a)	The non-Revenue Water Reduction Contract includes yearly targets with a progressive improvement, as the project was extended to 2018, the new EOT value corresponds to the target for 2018 (improved from the initial EOT corresponding to 2016).	2/24/2016	2/24/2016
Impact	Increase in number of active (water) connections	Modify EOP P(a)	Revision to the Reduction target of 5.000 (75.000 to 70.000) corresponding to the new evaluation made by the EA.	2/24/2016	2/24/2016

Please note that the Overall Stage represents the stage of the operation at the time of this report's publication, which might not necessarily match the stage of the operation during the PMR Cycle to which the report pertains.