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DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

THE BAHAMAS

**WSC SUPPORT PROGRAM – NEW PROVIDENCE WATER SUPPLY
AND SANITATION SYSTEMS UPGRADE**

(BH-L1028)

LOAN PROPOSAL

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Electronic Links	
REQUIRED	
1.	Annual Operating Plan (AOP) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36453510
2.	Procurement Plan http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36453509
3.	Monitoring & Evaluation Arrangements http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36453511
4.	Environmental and Social management Report http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36453505
5.	Safeguard and Screening Form for Screening and Classification of projects (SSF) http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36453507
OPTIONAL	
1.	Technical Options and Design http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36453508
2.	Analysis of Project Cost and Economic Viability http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36453506
3.	Institutional analysis/personnel, procedures other aspects of implementation capacity/ Financial Analysis http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36453504
4.	Legal and regulatory framework http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=36453503

Abbreviations

AOP	Annual Operating Plans
CS	Country Strategy
EIA	Environmental Impact Assessment
ESA	Environmental and Social Analysis
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Strategy
GIS	Geographical Information Systems
GOBH	Government of Bahamas
ICAS	Institutional Capacity Assessment System
ICB	International Competitive Bidding
IDB	Inter-American Development Bank
MIS	Management Information System
MOF	Ministry of Finance
MOTE	Ministry of The Environment
NRW	Non Revenue Water
O&M	Operation and Maintenance
OC	Ordinary Capital
OM	Operations manual
PEU	Project Execution Unit
PMU	Project Management Unit
POD	Proposal for Operation Development
PPP	Public-private-partnership
PSC	Project Steering Committee
SCADA	Supervisory Control And Data Acquisition
TC	Technical Cooperation
URCA	Utilities Regulation and Competition Authority
WSC	Water and Sewerage Corporation

PROJECT SUMMARY
THE BAHAMAS
WSC SUPPORT PROGRAM – NEW PROVIDENCE WATER SUPPLY
AND SANITATION SYSTEMS UPGRADE (BH-L1028)

Financial Terms and Conditions			
Borrower: Water and Sewerage Corporation (WSC)		Amortization Period:	25 Years
Executing Agency: Water and Sewerage Corporation (WSC)		Grace Period:	5 Years
Guarantor: The Commonwealth of the Bahamas		Disbursement Period:	5 Years
Source	Amount	Supervision and	
IDB (OC)	81,000,000	Inspection Fee:	*
		Interest Rate:	Libor-Based
Local		Credit Fee:	*
Total	81,000,000	Currency:	US Dollar – Single Currency Facility
Project at a Glance			
<p>Project Objective/Description: The general objective of the proposed operation is to improve the efficiency and quality of service provision of potable water, address immediate problems of sanitation in New Providence and prepare for the implementation of economic and environmental regulation, and create and support the corresponding regulatory entities. The specific objectives are to: (i) reduce water losses; (ii) strengthen the institution of the WSC; (iii) upgrade and rehabilitate selected sewerage infrastructure; and (iv) improve the legal and regulatory framework of the sector. The project components are: (i) Non Revenue Water (NRW) Reduction; (ii) WSC Institutional Strengthening; (iii) Rehabilitation and upgrade of sewerage infrastructure and preparation of a Wastewater Treatment Master Plan; and (iv) Upgrade legal and regulatory framework.</p>			
<p>Contractual condition prior to first disbursement will be: the Water and Sewerage Corporation (WSC) shall present to the Bank: (i) evidence that the WSC has assigned a Project Manager for the project, in accordance with terms of reference previously approved by the Bank (¶3.2); (ii) evidence that the Borrower has assigned the members of its staff that will compose the Project Management Unit (PMU) (¶3.2) and (iii) the presentation of evidence that WSC's Board has approved an Operations Manual for the program, in accordance with terms previously agreed with the Bank (¶3.2).</p>			
<p>Contractual conditions for execution of Component 4 will be: the presentation of evidence that the GOBH has established a committee with representatives from WSC, Ministry of Finance (MOF) and Ministry of The Environment (MOTE) for the implementation of Component 4. This will be a contractual condition for execution prior to starting disbursement on Component 4 (¶2.7).</p>			
<p>With the consent of the Bank, up to the equivalent of three hundred sixty three thousand dollars (US\$363,000) of the resources of the Financing may be used to reimburse expenditures incurred after August 3rd, 2011 under the program for the preparation of the Organizational Restructuring Strategy of the WSC.</p>			
<p>Exceptions to Bank policies: None</p>			
<p>Project qualifies for: SEQ <input type="checkbox"/> PTI <input type="checkbox"/> Sector <input type="checkbox"/> Geographic <input type="checkbox"/> Headcount <input type="checkbox"/></p>			
<p>Procurement: the procurement of works, goods and consulting services will be done in accordance with the bank's new procurement policies and procedures (documents GN-2349-9 and GN-2350-9).</p>			

(*) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable provision of the Bank's policy on lending rate methodology for ordinary capital loans. In no case will the credit fee exceed 0.75% or the inspection and supervision fee exceed, in a given six-month period, the amount that would result from applying 1% to the loan amount divided by the number of six-month periods included in the original disbursement period.

I. DESCRIPTION AND RESULTS MONITORING

A. Background, Problem Addressed, Justification

- 1.1 **Institutional and Legal Framework.** The water and sanitation services in Bahamas are provided by several utility companies such as the Water and Sewerage Corporation (WSC), Grand Bahamas Utility Company, and Paradise Utilities, in addition to other independent network providers. The largest is the WSC, which is a state-owned utility established by the WSC Act 1976 with the mandate to provide adequate supplies of water for domestic use, and agricultural purposes, urban and industrial use; as well as to provide adequate facilities for drainage and the safe disposal of sewage and industrial effluents. In addition the WSC has responsibilities for the management of the water resources of The Bahamas. In the case of several tourist developments, water and sanitation services are provided by the private developers from their own facilities. Legislation of The Bahamas, such as the Out Islands Act, provides incentive for developers to provide their own water supply.
- 1.2 WSC is the main provider of water and sewerage services in The Bahamas. Its service base includes about 66,000 customers on 13 islands that are spread over more than 200,000 square kilometers of territory, including the main population center of New Providence.
- 1.3 The Ministry of Environment has functions related to the protection of the water resources, but the overall set up does not properly assign responsibilities or put in place capabilities required to effectively address these threats. Responsibilities for managing the environmental threats are not well-defined and are spread across various departments and sections within the Ministry of the Environment, a number of government agencies and corporations, including WSC. In other cases, the agencies have not been provided with the adequate human and financial resources to carry out their respective responsibilities. Also, insufficient government support, including resources and political will, has compromised the effectiveness of the Bahamian government agencies' mandate to protect and conserve the environment. Lastly, existing laws and codes are not enforced well. Stricter regulatory enforcement, including fines for violations, should gradually improve the behavior of major polluters.
- 1.4 The Cabinet is the highest decision making authority in The Bahamas. It is the body that decides on the level of financial support that Government will provide to the water and sanitation sector, particularly the WSC; but in most cases, the arrangements for such support require the concurrence of the Minister of the Environment and the Minister of Finance, and may also require ratification by the Parliament. Until an independent regulator is empowered with statutory powers to undertake economic regulation of the water and sanitation sector, by default, the Cabinet is the body responsible for setting tariffs for WSC. Therefore the main aspects regarding quality of service and tariffs are not free of political interference

and influence, particularly regarding tariff setting. Draft legislation has been prepared to expand the functions of the Utilities Regulation and Competition Authority (URCA) to regulate water and sanitation utilities (currently URCA regulates telecommunications), and the program will support the setup of the needed regulations and of the new functions of URCA. URCA has been operating since 2009, and replaced former regulatory entities integrating all areas of electronic communications and broadcasting.

- 1.5 **Sector indicators.** The availability of fresh water in The Bahamas is considered “scarce” by international standards and by far the lowest in Latin America and the Caribbean (LAC). Available renewable water per capita is 59.2 m³ compared to 68,000 m³ average for LAC. Fresh surface water is basically non-existent. The country, therefore, relies on a single source of water¹ which is only available as groundwater, which comes about as a result of rainfall.
- 1.6 Over-abstraction of groundwater is a concern. Over-abstraction can cause saltwater intrusion into the freshwater aquifer, creating abandonment of well fields permanently or for numerous years. The well fields on New Providence have a maximum capacity of approximately 1.5 million imperial gallons (mig) of fresh water per day while the demand is for approximately 10 mig. Of this amount 0.7 mig is taken from well fields; the balance is supplied by reverse osmosis and barging from Andros to New Providence. Lack of proper sewage collection and treatment are contributing to the contamination of the ground water. Water Management Consultants (WMC – 2003) indicate that over 65% of the groundwater samples collected in The Bahamas showed signs of microbial contamination, most likely from septic and other sources of sanitary wastewater, evidencing a significant threat to aquifer water quality and potentially human health in The Bahamas. Once polluted, ground water is very expensive to clean up. Protecting the resource from contamination is preferable and more cost effective than remediation.
- 1.7 The island of New Providence, which is the area of intervention of this operation, accounts for approximately 70% of the total population of the country. In this island, however, only 54% of dwellings have access to water supplied by WSC. The number of live residential connections was around 38,000, in 2010. This corresponds to about 133,000 people out of the total New Providence population of 248,300. Due to the level of quality of service received (especially low pressures averaging 19 psi, and occasional reddish water), and the lack of a regulatory regime governing connections, many customers have terminated their relationship with WSC and made alternative arrangements for their supply including private wells. The WSC therefore has to improve on its customer service, institutional capacity, monitoring and management of its operations including the restructuring of the organization.

¹ Information regarding the water resources of The Bahamas has been obtained from US Army Corps of Engineers: Water Resources Assessment of The Bahamas. Dec. 2004.

- 1.8 **Potable water service.** Where demand for water exceeds the available fresh resources, WSC expands supply through expensive reverse osmosis production facilities and barging from other islands. As a result, supply from reverse osmosis has grown by over 450 percent since year 2000, increasing WSC's cost of water purchase by US\$20 million over the same period. In this context of limited supply and high costs of expansion, the economic losses of high levels of non-revenue water (NRW) are considerable. WSC has NRW levels of about 50% in the last decade, and this is related mainly to the bad condition of the network, lack of maintenance, inadequate commercial practices, etc. The challenges to be addressed to reduce NRW are described in the [Technical link](#). A plan has been proposed following best practice to substantially reduce the existing level of NRW to 2.5 million gallon per day, half of the current losses. The plan has been designed taking into account lessons from past failed attempts (mainly the need for continuity in the control of leaks, and other operational aspects), and will be implemented with the support of a specialized company.
- 1.9 In order to protect the aquifer and resolve other environmental concerns, draft legislation has been prepared to strengthen the Ministry of the Environment, legally and technically to take over the necessary functions of environmental regulation and control. This institutional arrangement exists in many countries in LAC, and has been shown to be effective in dealing with the problems of management of fragile water resources. The program will support the setup of regulations and of the environmental regulator.
- 1.10 **Sewerage service in New Providence.** Concerning the sewerage service in New Providence (and other parts of the country), the WSC has been unable to provide a sustainable and efficient service.² The total sewerage network has some 722,000 feet (220 km), of which 20% are force mains and 80% are gravity systems. Networks were built between 1985 in the northern part of the island and 2007 in the North West. Overall, 65% of the system is older than 20 years.
- 1.11 A major concern related to the sewerage system is that infrastructure conditions have declined significantly over the years, mainly due to poor maintenance and infrastructure renewal. According to WSC information, 2009 operation and maintenance (O&M) expenses for sewerage were around 2.3 million dollars. Considering an estimated value of sewerage assets of 162.5 million, the relationship between O&M and asset value is 1.5%, which is considered very low. Complaints by customers related to back up blockages and main leaks are large (427 in 2010, representing a high value of 2.1 per km per year). The consequences are spills, blockages, malfunctioning and risks of major failures, which result in environmental, social and health impacts. Therefore an improvement in infrastructure and its O&M are needed to address these issues and restore adequate levels of services.

² See details in Castalia: Bahamas. Water and Sanitation Sector Plan, 2009.

- 1.12 Another significant characteristic of the sewerage network in New Providence is that it is highly dispersed and fragmented. Some 30 independent systems are distributed in seven major catchment areas. A large number of pumping stations are installed in each of these areas (116 in total) due to the flatness of the island. A waste water treatment plant has been built in each sub-catchment area. The wastewater, either treated or untreated, is then injected underground through 13 wells, to a depth between 300 – 600 feet where it diluted and dispersed.
- 1.13 A Wastewater Master Plan is essential for planning the wastewater system expansion, and to propose the most suitable solutions in terms of conveyance (pumping) disposal arrangements, and the necessary levels of treatment associated with the selected disposal sites, influent characteristics, impacts and regulations.
- 1.14 **Governance and institutional challenges.** The existing governance framework for the water and sanitation sector lacks provisions for adequate accountability and autonomy of the WSC. The three principal deficiencies in the sector's governance framework are: (i) an incomplete and inappropriate legal and regulatory framework; (ii) lack of sufficient autonomy for the management of the WSC; and (iii) a mechanism for providing subsidies to the WSC that is neither efficient nor effective. The poor operational and financial performances are linked with WSC's poor governance framework.
- 1.15 WSC does not have the autonomy to make the decisions needed to improve the service, due to inadequate corporate governance practices and lack of incentives; and it has insufficient revenues, due to politically set tariffs at low levels. In recent years, WSC has been unable to cover the costs of its operations and operational deficit has been between US\$10 million to US\$14 million, and as a consequence the Government has had to provide transfers to WSC of the order of US\$19 million to US\$28 million per year. Annual investments have been about US\$24 million per year. As part of its overall cost WSC also has significant overtime staff cost.
- 1.16 The draft law for economic regulation and for environmental regulation and the creation of independent regulators will provide the means to introduce economic and environmental rationality in tariff setting as well as control over quality of services, and on needed investments as well as on environmental protection. The promotion of separation of roles and the establishment of a clear regulatory function represent sectorial best practice and are validated in the Bank's current Public Utility Policy, which needs to be addressed. While changing laws represents a challenge, given previous Bank interventions in The Bahamas, this program provides a window of opportunity for the Bank to support the process of achieving a new regulatory framework for the WSC.
- 1.17 **IDB Assistance.** The Bank has financed three interventions in The Bahamas in recent years: (i) Water and Sanitation Strategic Sector Plan (WSSP) completed in 2009. The WSSP identified operational areas where WSC should reduce costs or improve revenues and made recommendations for WSC to move toward financial sustainability; (ii) Technical Cooperation (TC) ATN/WP-11596-BH (2009/2010) "Preparation of Legal and Regulatory Framework Update" to address the legal and

policy impediments afflicting the WSC and water sector of The Bahamas; and (iii) in 2004 the WSC/Ministry of Works completed the implementation of Loan 1112/OC-BH “Family Islands Potable Water Project”. This project had the objective of improving the quality of public water service for several small settlements in the Family Islands.

- 1.18 **Link to Country Strategy and consistency with the GCI-9.** The proposed project is in line with the Bank’s Strategy with The Bahamas 2010 - 2014 (GN-2558-2). As stated in the Country Strategy (CS), the aim of the project is to improve the efficiency of service provision and coverage of water supply and sanitation systems, within the pillar of enhancing economic growth through the provision of critical infrastructure. Specific CS targets include: improvement of the operational and financial performance of WSC, expansion of services, reduction of physical losses, and strengthening the legal and regulatory framework of the sector. The program is aligned with the following GCI-9 priority areas: lending to small and vulnerable countries and support for climate change initiatives, renewable energy and environmental sustainability. Finally the program aligns with the Bank’s Results Framework 2012-2015 indicator, under the infrastructure for competitiveness and Social welfare, for increasing the percentage of households with new or upgraded water supply and sanitation connections for afro-descendants.

B. Objective, Components and Cost

- 1.19 The general objective of the proposed operation is to improve the efficiency and quality of service provision of potable water, address immediate problems of sanitation in New Providence and prepare for the implementation of economic and environmental regulation, and create and support the corresponding regulatory entities. The specific objectives are to: (i) reduce water losses; (ii) strengthen the institution of the WSC; (iii) upgrade and rehabilitate selected sewerage infrastructure; and (iv) improve the legal and regulatory framework of the sector.
- 1.20 **Component 1: NRW Reduction (US\$49 million).** This component will finance a NRW Reduction Contract to address water losses in New Providence. The activities will be as follows: (i) perform a Baseline Survey and prepare a detailed NRW Reduction strategy; (ii) leak detection and repairs; (iii) construction works and equipment including mains and service lateral replacement, pressure control, data collection and monitoring; (iv) NRW/asset management information system (MIS) that integrates key existing WSC systems such as Geographical Information Systems (GIS), Work Order Management, customer information, and network analysis; (v) NRW training for WSC staff; and (vi) consulting services to assist with execution.
- 1.21 **Component 2: WSC Institutional Strengthening (US\$5.5 million).** This component will finance several activities geared towards: (i) introducing and integrating supervisory control and data acquisition (SCADA) capabilities to improve system monitoring and design operating improvement actions; (ii) automatic reading meters in targeted accounts to improve staff productivity and

customer service; (iii) winning back customer campaign who have moved to individual private well supplies as a result of deficient service levels; (iv) training, development and implementation of the new organizational structure including: an Operational Strategy design, HR Strategy and definition of benchmark performance standards to prepare WSC for regulation by the Utilities Regulation and Competition Authority (URCA); and (v) a tariff study and scheme proposal in alignment with the new sector economic regulation.

- 1.22 **Component 3: Rehabilitation and upgrade of sewerage infrastructure and preparation of a Wastewater Treatment Master Plan (US\$15.580 million).** This component will finance the rehabilitation of: (i) malfunctioning infrastructure that is causing environmental and potential health problems; (ii) critical lift stations which require civil/mechanical/electrical and security upgrades; and (iii) collection systems and force mains to address failing and inefficient/ineffective sewers. It will also finance the preparation of a Wastewater Master Plan to address the wastewater collection, treatment, and disposal needs of New Providence. The Master Plan will also include the necessary technical, social, environmental and financial analyses.
- 1.23 **Component 4: Upgrade legal and regulatory framework (US\$3 million).** This component will finance (i) consultants to draft economic regulatory bylaws, and to train personnel, that will be utilized by URCA in its expanded responsibilities as water and sanitation regulator; and (ii) the hiring of qualified staff, training, laboratory upgrade, office rental and drafting of various bylaws that will be required by the new independent Environmental Regulator, which is to be established mainly through the reorganization of existing units in the Ministry of the Environment. After the project implementation ends, the Government of The Bahamas will finance any recurrent costs related to the office rental and staff for the new independent Environmental Regulator.

Table I-1

Key Results	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Target
Volume of NRW (avg. daily volume) MGL	5.5	5.3	4.7	4.0	3.3	2.5	2.5
Households with improved access to drinking water in the house (better pressures, quality, and volume)	0	0	5,000	10,000	10,000	13,000	38,000
Households with access to drinking in the house with new or expanded systems (home)	0	0	0	0	500	1,500	2,000
Households with reduction in the use of private individual wells	0	500	500	1,000	1,000	2,000	5,000
Reduced staff overtime (%)	100%	100%	95%	90%	80%	75%	75%
Meter reading efficiency (re-reads) for large commercial customers' (%)	84%	84%	90%	95%	98%	98%	98%
Win-back customers # (households reconnected)	0	0	0	0	500	1,500	2,000
Households connected to an improved sanitation network		0	4,000	6,000	8,662	8,662	8,662
Flow treated daily (MIG)	2.1	2.1	2.6	3.6	6.5	6.5	6.5
Economic regulator issues WSC license					1		1
Environmental regulatory issues WSC licenses					1		1

C. Key Results Indicators

- 1.24 The indicators are described in more detail in the Result Framework of the project in Annex II. The main outcomes, extracted from the complete result framework, are presented in Table I-1.

II. FINANCING STRUCTURE AND MAIN RISKS

A. Cost and Financing

- 2.1 The total cost for the project is US\$81 million. Of that amount, US\$81 million will be drawn from the Bank's Ordinary Capital Resources (OC). The following table provides a breakdown by investment category and source of financing.

Table II-1

Category	IDB	Local	Total
1- Project Administration			
1.1 Project Management and Supervision	1,820,000		1,820,000
2- Direct Costs			
2.1 NRW Reduction	49,000,000		49,000,000
2.2 WSC Institutional Strengthening	5,500,000		5,500,000
2.4 WW Infrastructure and Master Plan	15,580,000		15,580,000
2.5 Legal and Regulatory	3,000,000		3,000,000
3- Concurrent Costs			
3.1 Auditing	120,000		120,000
3.2 Monitoring and Evaluation	460,000		460,000
4- Unallocated			
4.1 Contingencies	3,120,000		3,120,000
4.2 Financial Charges	2,400,000		2,400,000
Total	81,000,000		81,000,000
Percentage (%)	100%	0%	100%

B. Environmental and Social Safeguard Risks

- 2.2 By improving the availability of reliable water supply this operation will contribute to the mitigation of health risk and improvement of the well being of all existing customers of WSC (approximately 54% of Nassau's population) and with a customer win-back strategy it is expected that this coverage would reach about 62% in five years. The sanitation component will address the needed rehabilitation of malfunctioning infrastructure and assist with improving overall environmental conditions. Key policies and directives triggered in the project include: B.01; OP-704, OP-102; B.02; B.03; B.06; B.07; B.07; B.11; and B.17. These pertain to natural hazards, disclosure of information, environmental assessment, and monitoring.
- 2.3 According to the Category "B" classification assigned to this program, the Environmental and Social Strategy (ESS) involves the preparation of an Environmental and Social Analysis (ESA) including an Environmental and Social Management Plan (ESMP) for the project. Environmental and social procedures will be included in the Operational Manual (OM).

- 2.4 The project is not expected to have any major large scale, significant and/or irreversible negative environmental or social impacts. Temporary negative expected impacts are mainly related to wastewater treatment plant rehabilitation works; and potable water supply infrastructure construction works and operations, including construction noise, dust, waste generation, traffic interference and occupational risks, for which there are standard mitigation measures. Positive impacts will be fostered by improving efficiency of the operations of the WSC and addressing the malfunctioning wastewater treatment plants operated by this utility.

C. Risks and Special Considerations

- 2.5 **Fiduciary Risks.** The Bank, in consultation with WSC, has identified the major risks that are likely to affect the proposed project in the various categories of development effectiveness, sustainability, governance, and fiduciary, among others. The parties have also jointly developed a Risk Mitigation Matrix which outlines the necessary mitigation actions to be taken. Risks that require attention include the lack of institutional capacity, reduction of NRW, establishment of the economic and environmental regulators, and delays in approval of required legislation. The risks level pertaining to financial management and procurement is considered to be low-moderate and the WSC's adherence to the normal planning and reporting requirements of the Bank will be assured by Bank supervision. A joint review of the matrix will be undertaken on an annual basis, and any necessary additional mitigation actions will be adopted.

D. Other Key Issues and Risks

- 2.6 **Institutional Viability.** The results of the Institutional Capacity Assessment System (ICAS) indicate a satisfactory level in terms of development, and a Low Risk for the program's execution. This assessed capacity is based on WSC's experience in previous investment programs with the Bank and other donors. It was concluded that the WSC is capable of implementing the component related to Institutional Strengthening as well as sewerage rehabilitation. For the successful execution, monitoring and evaluation of the NRW Reduction component and to sustain the investments made, WSC will need stronger planning and organizational capacity as well as a stronger contracting and administration capacity. For this purpose, WSC will hire consultancy services, as part of the PMU staff, for the five years of execution, to supervise its execution and leave installed capacity in WSC's staff.
- 2.7 The component regarding the improvement of the Legal and Regulatory Framework for environmental and economic regulation will be implemented by the WSC under the oversight of a Government of The Bahamas (GOBH) Committee chaired by the Ministry of the Environment (MOTE). This committee will only be acting over activities related to Component 4 and will be dismissed upon completion of its execution. As stated before, there is always a risk of delays in adoption of new legislation as this is solely the prerogative of the Parliament. However the GOBH agreed to include Component 4 to address the need for the establishment of independent economic and environmental regulators. The presentation of evidence that the GOBH has established such oversight committee,

with representatives from WSC, Ministry of Finance (MOF), URCA, The Attorney General's Office (AGO), and Ministry of The Environment (MOTE) for the implementation of Component 4, will be a contractual condition for execution prior to starting disbursement for Component 4. Additionally, as a condition of the execution of the Program, prior to the award of the NRW contract, the Borrower will submit evidence that it has submitted the draft legislation to Cabinet. The committee will also support and facilitate the process of approval of the new legislation. This will result in considerable mitigation of the risks related to lack of ownership of the initiative and hence delaying its approval.

2.8 **Technical Viability.** The proposed technical solutions fully meet the needs for improvement of WSC's water distribution systems and sewage infrastructure in the most critical areas of operation. The works defined fully meet the technical requirements for this type of works which is supported by the following:

- a. A preliminary diagnosis was carried out. The diagnosis contemplated different options for rehabilitation, network improvement and institutional implementation.
- b. The options were budgeted considering local unit prices, technologies, WSC practices and civil works currently being implemented.
- c. The materials and technology proposed are known in The Bahamas and have been used in other projects by WSC.
- d. WSC already has knowledge on how to operate and maintain the new assets but they will improve this knowledge with the institutional strengthening component.
- e. All the contracts included in this loan will include start up, commissioning, training and operation manuals which will imply a strong knowledge transfer component.
- f. NRW contracts have been successful in other countries of the Caribbean such as Jamaica. The NWC of Jamaica has successfully implemented NRW programs³ and followed the methodology for this type of intervention in an adequate manner.⁴ The successful execution of NRW will imply a turnaround for WSC having high impact on its revenue increase, operational practices, customer services and sustainability. The achievement of the objectives of this component depends on WSC capacity to execute it and give sustainability in the long term.

2.9 **Financial Considerations:** A financial model was developed in collaboration with the WSC. Net operating cash flows are expected to improve over the next years. From negative values of about US\$8 to US\$17 million between 2005 and 2010, the deficit will be reduced to about US\$1.7 million starting in 2014. This is mainly due to the elimination of the bargaining costs, which will be feasible partly through the introduction of the NRW component. These bargaining costs reach US\$8 million per year. Further improvements, would be contingent on tariff increases, and other cost reduction measures. By 2014 the operational ratio will be 97%, up from 70% to 80% in previous years. Notwithstanding the above, net profit will continue to be

³ North Western Parishes Project in NWC Jamaica, 2009

⁴ The Manager's Non revenue Water Handbook, Farley et al., 2008

negative, in the order of some US\$15 million (down from US\$28 million in 2010) due to depreciation and financial expenditures. From 2014 onwards, the impact of the NRW component would be of some US\$ 3.0 in extra yearly revenue. WSC will continue to need the support of Government transfers that would amount to some US\$10 million, from 2014 onwards, down from a peak of US\$37 million in 2010.

- 2.10 **Financial Viability.** WSC's operating revenues have fluctuated between US\$37 million and US\$45 million, between 2005 and 2010, reflecting partly the high level of disconnected users observed in the last years. This has been the consequence of poor service, low pressures and other quality issues. The NRW component intends to reverse this situation, and would allow for significant increases in users, through a win-back campaign supported by new water availability and better pressure controls. The overall demand is expected to grow from the current 40,000 users, to 50,000 users by 2017. Furthermore it is expected that water availability will increase from a current level of 28 lts/per/day to about 35 lts/per/day. All these elements will contribute to an increase in revenues to levels of more than US\$58 million, starting in 2014.
- 2.11 Operating expenses over the 2005-2010 periods have grown from US\$47 million to US\$57 million. The main reason for this increase being the need to purchase desalinated water to supplement the other existing sources of water (barging from other islands, and own wells). As mentioned earlier the elimination of the barging system will allow for a reduction of about US\$8 million per year. Further reduction is expected from savings in desalination plants' costs, reductions in fuel and oil unit costs, and electricity costs. These would allow for overall operating costs to remain at a level of about US\$60 million for the next 5 years.
- 2.12 A significant issue affecting the long-run self sustainability of WSC is the fact that tariffs have not been adjusted since 1999. Therefore the government has had to provide for significant funds to subsidize operations and investments. It is expected that with the new regulatory framework tariffs based on full real cost will be implemented over the medium run, in coordination with the expected service improvements
- 2.13 WSC's challenges are significant in the short and medium term. The absence of an economic regulator coupled with the absence of a clear tariff policy has placed WSC in an environment where decisions are made more on political rather than commercial basis. Lack of sufficient revenue streams has led to the lack of proper maintenance, investments and rehabilitation, which in turn has led to deteriorating infrastructure and increasing customer dissatisfaction. The increasing use of Reverse Osmosis for water desalination production has largely exacerbated the dependency on government subsidies to finance operating expenses and the capital investment program.
- 2.14 WSC will drastically need to reduce its Non Revenue Water losses to improve its financial position. A NRW program would lead to additional sales of water, and some savings in production. However, in the short term, WSC will still need additional government assistance for operational subsidies. As shown in the financial link, WSC will increase its cash flow position only in the fourth year of

the project and from thereon will start reducing its dependency on government subsidies.

- 2.15 **Regulatory Framework.** The creation of a regulator will allow WSC to focus on the quality and efficiency of its services. This new institutional arrangement will permit WSC to negotiate with the new regulatory authority a streamlined process for water rates review and corresponding approval. URCA, acting as an independent regulatory authority will create the conditions which will allow WSC to develop and strengthen its financial management and long term planning capacity (see [Legal and Regulatory Framework](#) link).
- 2.16 The project will support the establishment of an economic regulator, expanding the role of the existing telecommunications' regulator (URCA), and will establish the basis for sound tariff setting rules, proper service quality levels, and verification of compliance. The establishment of URCA as the economic regulator of the water sector will replicate the successful model followed in the establishment of regulation of the telecom sector. This takes into account best practice in the sector as validated in the Bank's Public Utilities Policy (OP-708).
- 2.17 The implementation of the proposed program would allow WSC to improve its overall financial situation, reduce costs and gain efficiency. The long-term objective for the Bank is in line with WSC's strategy to achieve financial sustainability.
- 2.18 **Procurement Execution.** Procurement for the proposed program will be carried out in accordance with the Policies for the Procurement of Works and Goods Financed by the Inter-American Development Bank (GN-2349-9) and the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (GN-2350-9), and with the provisions established in the loan contract and these procurement fiduciary arrangements. Procurement of goods, works and consulting services will be reviewed using ex-ante methodology for all critical processes and will be reviewed with the PMU which will gain knowledge in Bank requirements for the specific type of procurement process. Annex III includes details on program procurement. The PMU will update the procurement plan annually at the same time as the AOP.
- 2.19 **Single Source Method.** The single sole source method for selection of an already identified firm for carrying out WSC's organizational development and implementation of the organizational restructuring strategy has been requested by the Borrower and recommended for approval based on the overall interests of project results and in line with provisions in Bank policy. The firm is Castalia Strategic Advisors and the new contract is for an estimated amount of US\$700,000. This contract will consist of the development and implementation of the WSC organizational structure per agreed strategy, benchmark performance standards for regulation by the Utilities Regulations and Competition Authority (URCA) and training of WSC staff. Castalia won by international competitive bidding two tenders issued by the Bank: (i) preparation of the Water and Sanitation Strategic Sector Plan for The Bahamas in 2008 (Water and Sanitation Initiative), and (ii) Preparation of Legal and Regulatory Framework Update (ATN/WP-11596-BH)

in 2009. Given these prior assignments and the knowledge and experience acquired by the firm on WSC's organizational structure, the current assignment for development and implementation of the organizational restructuring strategy is considered as continuation of service under the Bank's procurement policy.

- 2.20 **Retroactive Financing.** With the consent of the Bank, up to the equivalent of three hundred sixty three thousand dollars (US\$363,000) of the resources of the Financing may be used to reimburse expenditures incurred under the program for the preparation of the Organizational Restructuring Strategy of the WSC for a contract with Castalia Strategic Advisors. Said expenditures shall have been incurred before the date of Loan approval but after August 3rd, 2011 (date of Project Profile eligibility). Consideration was given to the award of the contract for sole source selection following the two previous contracts, mentioned in ¶2.19 above, for the same objective that were awarded in two competitive processes. This is consistent with the Bank's procurement policies for retroactive finance approval.
- 2.21 **Socio-economic Viability.** Standard cost-benefit analysis has been carried out for the rehabilitation of sewerage infrastructure (Component 3), with the result that the Net Present Value of the project, discounted at the rate of 12%, is US\$3.0 million. The Internal Rate of Return is 15%. Benefits due to cost savings to WSC are US\$16 million, and by themselves cover investment costs. In addition, US\$1.4 million have been established as environmental benefits for the households connected to the sewerage system. Sensitivity analysis indicates that the project is still economically feasible with unfavorable changes of $\pm 20\%$ in the main parameters ([Socioeconomic Evaluation](#) link).
- 2.22 For the Non Revenue Water component, a Net Present Value of US\$3.5 million was obtained, with an Internal Rate of Return of 14%. The main benefits (US\$41 million) are the result of the savings that households would obtain by eliminating the use of their own private wells, and also the value associated with additional consumption. Sensitivity analysis indicates that feasibility is only maintained with unfavorable changes of $\pm 10\%$ in the main assumptions or parameters. It is estimated that about 9% of the beneficiaries of the investment program are poor households, as defined by The Bahamas's poverty line.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary Implementation Arrangements

- 3.1 The borrower and executing agency for the proposed operation will be the WSC, and The Bahamas will be the Guarantor. The operation complies with the Bank's policy on "Guarantees required from the Borrower" (OP-303). The Bahamas will provide its joint and several guarantee (including repayment of principal, payment of interest and fees, and provision of additional resources, and assurance of compliance with the objectives and purpose of the loan).
- 3.2 For the implementation of the project the WSC will establish a dedicated Project Management Unit (PMU) which will be composed as a minimum by the Project Manager; a senior level Engineer for the NRW component; a senior level Engineer

for the Wastewater component. The PMU will be supported with a senior level Auditor (Internal Control and Compliance Unit) and an administrative assistant. Additional support, operating from their specific units will include: a senior level Legal Counsel (Administration Department); a mid-level Financial Management specialist (Management Accounts Unit); and, a mid-level Procurement specialist (Purchasing Department). In addition, WSC will hire consultancy services, as part of the PMU staff, for the five years of execution, to supervise its execution and leave installed capacity in WSC's staff. **As contractual conditions prior to first disbursement, the WSC shall present to the Bank: (i) evidence that the WSC has assigned a Project Manager for the project, in accordance with terms of reference previously agreed upon with the Bank; (ii) evidence that the Borrower has assigned the members of its staff that will comprise the Project Management Unit (PMU) and (iii) the presentation of evidence that WSC's Board has approved an Operations Manual for the program, in accordance with terms previously agreed with the Bank.**

- 3.3 The PMU's specific responsibilities will include: (i) coordinating and supporting the preparation of the Annual Operating Plans (AOP); (ii) preparation of budget, project accounting, and requests to replenish the program's funds; (iii) preparation of annual procurement plans and the processing of procurement for goods, works, non-consulting services and consultants for the program; (iv) coordinating the preparation of technical reports and the periodic and end-of-year financial reports; (v) monitoring and evaluating the progress of project activities and analyzing variances of actual results against plans in all components; and (vi) serving as a liaison for the program and the Bank. Financial Audits: for each fiscal year during project execution, the PMU will produce semi-annual financial reports for the project and annual Audited Financial Statements. The audit will be done by a firm of independent public accountants acceptable to the Bank. The audit will be financed from loan proceeds.
- 3.4 For activities in Component 4, MOTE will chair a Committee with representatives from WSC, MOF and URCA that will oversee execution and performance of this component. This committee will function outside the governance structure of the new regulators and that will only last for the period required for the execution of the activities financed under Component 4. The committee will be also responsible for the achievement of all economic indicators with implications for the program and the timely delivery of legislation' and for the Economic and Environmental Regulatory functions by the fifth year of the program. The program will be executed following the AOP that will be included for each activity in the annual program: its goals, budget, source of funding, and responsibility for execution. The program's OM will set forth the details regarding program execution, including coordination of activities among different offices. The need to update the program's Operations Manual will be assessed during the midterm review.

B. Summary of Arrangements for Monitoring Results

- 3.5 The PMU will be in charge of monitoring the performance and progress of program execution ([Monitoring and evaluations](#) link). The PMU will submit two semiannual progress reports each year throughout the life of the project, within 90 days after

the end of the calendar year or half year. Additionally, with Bank resources, independent evaluators will be hired to conduct a midterm and final evaluation of the program.

- 3.6 The WSC General Manager and Executives will provide strategic direction, coordination and support for project execution. The project manager will be responsible for monitoring progress against agreed benchmarks and assessing the continued viability of the project.
- 3.7 Administration missions will be conducted by the IDB semi-annually to monitor relevant technical, operational and financial aspects of the project. The PMU will be responsible for developing the system for gathering and maintaining the data related to the different indicators included in the Results Framework. An evaluation consultant will be hired by the PMU during the first semester of execution to assist in determining the methodology and gathering the data for the baselines of program indicators. Progress toward meeting the different targets will be evaluated and communicated to the Bank in the semi-annual progress reports.
- 3.8 At the end of 30 months from the date of the loan contract or after 50% of the loan's resources have been committed, whichever comes first, a mid-term review will take place with the help of an external consultant and with loan resources. The external evaluator will focus on, among other things: (i) level of progress in attaining the program's objectives stated in the Results Matrix; (ii) level of acceptance of procedures developed under the program; and (iii) degree of effectiveness of both the project's internal and the Bank's monitoring and supervision system.
- 3.9 The final evaluation, to be carried out also with the help of an external consultant and with loan resources, is to take place after 90% of loan resources have been committed. The evaluation will assess: (i) the degree of attainment of program objectives in relation to plans and the reasons for any variances; (ii) the organization established for program execution; (iii) implementation and acceptance of procedures and systems developed through the program; (iv) sustainability of the activities funded under the program; (v) impact of the program based on a comparison of ex-ante and ex-post indicators and economic evaluation; and (v) lessons learned from the execution of the institutional components, that could be applied to future public sector reform projects. The result of this final evaluation will be used as an input for the program completion report to be prepared by the Bank ([Monitoring and evaluations link](#)).
- 3.10 **Disbursement Timetable.** The disbursement period for the project is five years. The contemplated disbursement schedule is as follows:

Table III-1 Disbursement schedule (US\$)

Year	1	2	3	4	5	Total	%
IDB	7,302,545	18,291,133	22,962,529	22,962,529	9,481,264	81,000,000	100
WSC							0
Total	7,302,545	18,291,133	22,962,529	22,962,529	9,481,264	81,000,000	100

Development Effectiveness Matrix			
Summary			
I. Strategic Alignment			
1. IDB Strategic Development Objectives	Aligned		
Lending Program	The intervention contributes to the lending program to small and vulnerable countries, and to support climate chance initiatives, renewable energy and environmental sustainability.		
Regional Development Goals	The intervention contributes to reducing the incidence of waterborne diseases (per 100,000 inhabitants).		
Bank Output Contribution (as defined in Results Framework of IDB-9)	The intervention contributes to Bank output: Households with new or upgraded water supply, Households with new or upgraded sanitary connections, and respective Afro-descendant sub-populations.		
2. Country Strategy Development Objectives	Aligned		
Country Strategy Results Matrix	GN-2558-1	The proposed operation contributes to the following 2010–2014 CS objectives: (i) Improve the operational and financial performance of the WSC; (ii) Expand services and reduce physical loss; (iii) Strengthen the legal and regulatory framework for the sector.	
Country Program Results Matrix	GN-2617	The project is included in the 2011 Country Program Document.	
Relevance of this project to country development challenges (If not aligned to country strategy or country program)			
II. Development Outcomes - Evaluability	Highly Evaluable	Weight	Maximum Score
	8.6		10
3. Evidence-based Assessment & Solution	7.2	25%	10
4. Ex ante Economic Analysis	10.0	25%	10
5. Monitoring and Evaluation	7.1	25%	10
6. Risks & Mitigation Monitoring Matrix	10.0	25%	10
Overall risks rate = magnitude of risks*likelihood	Medium		
Environmental & social risk classification	B		
III. IDB's Role - Additionality			
The project relies on the use of country systems (VPC/PDP criteria)	Yes	Financial Management: Budget.	
The project uses another country system different from the ones above for implementing the program			
The IDB's involvement promotes improvements of the intended beneficiaries and/or public sector entity in the following dimensions:			
Gender Equality			
Labor	Yes		
Environment	Yes		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project			
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan.	yes		

The objectives of the operation are to improve the efficiency and quality of service provision of potable water, address problems of sanitation, implement economic and environmental regulation, and create and support the corresponding regulatory entities. To achieve this objective, the program proposes (1) a non-revenue water reduction contract, (2) institutional strengthening for the Water and Sewerage Corporation, (3) rehabilitation and upgrade of sewerage infrastructure and preparation of a wastewater treatment master plan, and (4) upgrade of the legal and regulatory framework. The program presents a clear diagnostic of the problem and proposed solution, however the POD does not present an evidence base on the effectiveness of the proposed solutions (internal validity) nor a discussion of the application to the current context (external validity).

Indicators in the results matrix have a baseline and well defined targets. In most cases the targets are realistic. For purposes of evaluation, the project proposes an ex-post cost-benefit analysis as well as a before and after comparison with no control group. A thorough cost-benefit analysis was conducted. The project has a risk matrix that identifies potential risks and mitigation measures.

Results Framework								
Objective	The general objective of the proposed operation is to improve the efficiency and quality of service provision of potable water, address immediate problems of sanitation in New Providence and prepare for the implementation of economic and environmental regulation, and create and support the corresponding regulatory entities. The specific objectives are to: (i) reduce water losses; (ii) strengthen the institution of the WSC; (iii) upgrade and rehabilitate selected sewerage infrastructure; and (iv) improve the legal and regulatory framework of the sector.							
Program Impact Indicators (Country Strategy Indicators the Program contributes to)								
	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Target	Comments/ Means of verification
Operating cost recovery of WSC %	61%	61%	65%	70%	75%	80%	80%	WSC accounting reports
NRW in New Providence (average daily volume)	5.5mig	5.3	4.7	4.0	3.3	2.5	2.5	Verification: WSC approved contractor reports
Increase in number of active connections	66,000	1,000	2,000	2,000	2,000	2,000	75,000	WSC commercial registry. Baseline has been updated to 2010.
Regulatory functions are separated from the provision of services	0	0		1			1	Economic regulation is separated from WSC. Verification: Law issued
Component 1. NRW Reduction								
	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Target	Comments/ Means of verification
Outputs								
NRW strategy approved	0	0	1				1	Verification: WSC approved contractor Report
Service connections replaced, maintained or disconnected (#)	0	1,000	2,000	6,000	7,000	7,000	23,000	Verification: WSC approved contractor Report
Leaks detected and repaired #	0	0	500	2,000	2,000	1,500	6,000	Verification: WSC approved contractor Report
WSC staff trained in NRW management (men-courses)						10	10	Verification: HR department report
Outcomes								
Volume of NRW (avg daily volume) MGL	5.5	5.3	4.7	4.0	3.3	2.5	2.5	WSC approved annual water balance
Households with improved access to drinking water in the house (better pressures, quality, and volume)	0	0	5,000	10,000	10,000	13,000	38,000	Verification: WSC commercial and technical reports

Households with access to drinking in the house with new or expanded systems (home)	0	0	0	0	500	1,500	2,000	Verification: WSC commercial reports
Households with reduction in the use of private individual wells	0	500	500	1,000	1,000	2,000	5,000	Verification: socioeconomic surveys
Component 2. WSC Institutional Strengthening								
	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Target	Comments/ Means of verification
Outputs								
SCADA systems functioning (systems)	0	-	-	1			1	Verification: Contractor handover documentation
Automated meters reading/ intelligence system for large commercial customers installed (#)	0	0	1,500	1,500			3,000	Verification: WSC biannual Report
Tariff study Report	0	0	0	1			1	Verification: Consultant Report
New organizational structure implemented and staff trained	0	0	0	0	1		1	Verification: WSC Report
Public relations and customer win-back campaigns #	0	0	1	0	1		2	Verification: PR plan implemented. WSC Report
Outcomes								
Reduced staff overtime (%)	100%	100%	95%	90%	80%	75%	75%	SCADA will eliminate need for staff to visit stations/facilities outside normal working hours, and improve response to failures Verification: WSC HR Report
Meter reading efficiency (re-reads) for large commercial customers' volume billed (%)	84%	84%	90%	95%	98%	98%	98%	Verification: WSC Commercial Report
Win-back customers # (households reconnected)	0	0	0	0	500	1,500	2,000	Verification: WSC commercial Report

Component 3. Minimum Wastewater Treatment Plants Upgrade and Preparation of a Wastewater Treatment Action Plan								
	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Target	Comments/Mean of verification
Outputs								
WWTP rehabilitated and disposal wells constructed	0	0	2	2	2	3	9	Verification: WSC Report
Lift stations rehabilitated	0		10	20	20	10	60	Verification: WSC Report
Collection systems and force mains rehabilitated/installed (miles)	0		1	1	1	1	4	Verification: WSC Report
Wastewater master plan prepared	0		1				1	Verification: WSC Report
Outcomes								
Households connected to an improved sanitation network		0	4,000	6,000	8,662	8,662	8,662	Verification WSC technical reports
Flow treated daily (MIG)	2.1	2.1	2.6	3.6	6.6	6.5	6.5	
Component 4. Upgrade legal and regulatory framework								
	Baseline	Year 1	Year 2	Year 3	Year 4	Year 5	Target	Comments/Mean of verification
Outputs								
Presentation of Draft Legislation	0		2					Verification: Law presented
Regulator established				2				Verification: Decreed issued
Outcomes								
Economic regulator issues WSC license					1		1	Verification: License issued
Environmental regulator issues WSC licenses					1		1	Verification: License issued

FIDUCIARY ARRANGEMENTS

COUNTRY: The Bahamas

PROJECT N° BH-L1028 NAME: WSC Support Programme

EXECUTING AGENCY: Water and Sewerage Corporation

PREPARED BY: Maria Teresa Soto-Aguilar (PRM) and David Ochoa (FM)

I. EXECUTIVE SUMMARY

- 1.1 The Bank's methodology for Project Risk Assessment (GRP) was utilized to identify the project's risks and to determine the corresponding mitigating measures. The Institutional Capacity Assessment System (ICAS or SECI) was used to assess the Water and Sewerage Corporation (SWC) in the capacity of Executing Agency to carry out the project's fiduciary execution.
- 1.2 The SECI assessment resulted in an overall institutional fiduciary execution capacity for WSC satisfactory and a low level risk for any investment project implementation. However, this project's objectives and sustainability of its model under the NRW Reduction contract will demand a continuous adjustment of WSC's organizational, planning and strengthening of the Internal Controls and Compliance Unit capacity.
- 1.3 The Bahamas' procurement systems were evaluated in 2005 using the OECD/DAC methodology resulting in a series of recommendations for modernization and, in 2010, with similar results, using the same methodology as part of an effort by the Government to initiate a reform of the national public procurement system and undertaken by the Ministry of Finance. This reform effort is underway. Consequently, none of the country's public procurement systems or sub-systems is going to be applied in this project.
- 1.4 The WSC was established under the Water and Sewerage Corporation Act in 1976 (Chapter 196), revised in 2000, and is wholly owned by the Government of The Bahamas. The Ministry of Finance represents the Government of The Bahamas as the main shareholder of WSC and WSC reports to the Ministry of the Environment (MOTE). In terms of procurement rules and regulations, WSC abides to Government practices and some private sector practices; however, for this project execution, WSC will follow the Bank's procurement policies and procedures.
- 1.5 In late 2010 the Government of The Bahamas with IDB support conducted its first ever PEFA Assessment, the report was published in March 2011. The overall result of the PEFA showed that although some areas were good, others need some improvement. The stronger areas were: The credibility and comprehensiveness of the budget, access to fiscal information, the annual budget process, the transparency of taxpayer obligations and liabilities, recording of management cash balances debts and guarantees, and the quality of in year budget reports. The weaker ranked areas were: The classification of the budget, the effectiveness of the tax system in

assessing, registering and collecting tax payments and controls in procurement, payroll and internal controls.

- 1.6 The project will only have financing from the Inter-American Development Bank, therefore no other fiduciary policies will need to be observed or agreed upon for the purposes of its execution and the executing agency will be the Water and Sewerage Corporation.

II. EXECUTING AGENCY'S FIDUCIARY CONTEXT

- 2.1 The assessment conducted with the ICAS/SECI indicated that WSC has the necessary institutional capacity to assign a PMU under its organizational and normative framework to ensure the adequate fiduciary accountability and controls for the execution of this project. Therefore, the overall institutional fiduciary execution capacity for WSC was determined to be satisfactory indicating a low level risk for any investment project implementation. WSC has had previous execution experience with investment and technical assistance operations financed by the Inter-American Development Bank as well as other international donor institutions.
- 2.2 **Procurement.** The assessment noted that there are no consolidated procurement manuals or guidelines for project execution and government practices as well as private sector practices are the reference for some available written guidelines, therefore it is anticipated that the Bank Procurement Policies and procedures will be followed. It was noted that several of its employees have had previous execution experience with investment and technical assistance operations financed by the Inter-American Development Bank as well as other international donor institutions. However, this project's objectives and the sustainability of its model under the NRW contracting, present some capacity challenges that will demand a continuous adjustment of WSC's organization and planning capacity in line with the NRW Reduction contract administration and the strengthening of the Internal Controls and Compliance Unit to execute this contract.
- 2.3 For executing the project WSC plans to maintain the current Project Management Unit (PMU) that has been preparing the project, staffed with WSC engineers and administrative support. The following WSC staff will be assigned to the PMU for project execution:
- a Project Manager specifically assigned to this project
 - an Engineer to the NRW component
 - an Engineer to the Wastewater component
 - a Legal Counsel assigned from the LEG Department
 - an Auditor full time from the Internal Control and Compliance Unit
 - a Financial management staff working from the Management Accounts Unit
 - a Mid-level member from the Purchasing Department to follow up with execution of the project's procurement plan

- 2.4 The Bank will work with the PMU in order to strengthen its fiduciary capacity to carry out the procurement involved in this project focusing mainly in the two engineers who will carry out most of the procurement documentation and process activities.
- 2.5 **Financial Management.** The WSC has the institutional capacity to execute the project as well as adequate internal and external controls. The ICAS assessment indicated that WSC has a strong financial management administration, its internal control is satisfactory and the necessary institutional capacity to external auditors is PKF Bahamas.
- 2.6 The ICAS assessment indicates that WSC uses financial management software named SUNGARD THE System for its financial administration. SUNGARD HTE System provides satisfactory financial administration capacity for WSC by ensuring traceability of disbursements in relation to the approved budget. The Financial Administration section is led by the Deputy Manager/Financial Controller who has more than 25 years of sector experience. Her experience and professional capability should ensure the satisfactory financial management of the WSC Support Programme, once appropriate training in Bank procedures has been provided by the Bank.
- 2.7 Despite the solidity of the WSC financial management capability, the following issues were detected:
- a. Personnel in the Financial Administration section are not fully familiar with the Bank's procedures on the preparation of disbursement requests;
 - b. There is not an authorized and current Manual of Procedures for financial management, nor are there formal procedures regarding the formulation, execution and control of the budget;
 - c. There is a need to establish within the SUNGARD HTE System an accounting and financial records integrated with the WSC general accounting, that allows the identification of the project's transactions by source of funding and investment categories, in agreement with the Chart of Accounts approved by the Bank, and independent from the rest of WSC activities. Technically speaking, SUNGARD could be modified to include the Project Code of Accounts and so facilitate the financial management of the WSC.
- 2.8 The internal and external control capacity of the financial administration is quite solid.

III. FIDUCIARY RISK EVALUATION AND MITIGATION ACTIONS

- 3.1 The results of applying the Risk Assessment Matrix for the fiduciary component were of low-moderate risk, the institutional capacity assessed of WSC with the

SECI was Satisfactory and Low Risk, all of which are adequate in view of the expected fiduciary execution risks and planned Results Matrix.

- 3.2 Mitigation actions for recognized medium risk factors in fiduciary execution led to the following action plan and associated costs:
- a. An individual consultant with expertise in NRW Reduction contracts will be hired by the PMU to supervise its execution throughout its first five years of administration and leave installed capacity in WSC's staff.
 - b. For activities in Component 4, and being this more in the sphere of the MOF, WSC will chair a Joint Committee of representatives from WSC, MOF and MOTE that will oversee execution and performance of all economic indicators with implications on the programme and commit to achieve timely delivery of legislation and regulations to allow initiation of the Economic and Environmental Regulators functions by the fifth year of the program.

IV. ASPECTS TO BE CONSIDERED IN THE SPECIAL CONDITIONS OF CONTRACT

- 4.1 Based on the fiduciary risk evaluation and mitigation actions, In order to move forward the contract negotiations herein are those fiduciary arrangements that must be considered in the special conditions:
- 4.2 Special conditions prior to first disbursement:
- a. The presentation of evidence that the WSC has assigned a Program Manager for the Program, in accordance with terms of reference previously approved by the Bank;
 - b. The presentation of evidence that the WSC has assigned the members of its staff that will compose the Program Management Unit (PMU);
 - c. The presentation of evidence that WSC's Board has approved an Operations Manual for the Program, in accordance with terms previously agreed with the Bank.

A. Fiduciary Arrangements for Procurement Execution

- 4.3 Procurement for the proposed project will be carried out in accordance with the Policies for the Procurement of Works and Goods Financed by the Inter-American Development Bank (GN-2349-9) and the Policies for the Selection and Contracting of Consultants Financed by the Inter-American Development Bank (GN-2350-9), and with the provisions established in the loan contract and these procurement fiduciary arrangements. Additionally, the Borrower is required to prepare and submit to the Bank a draft General Procurement Notice.

- 4.4 **Procurement of Works, Goods and Non-Consulting Services.** The contracts for Works, Goods, and Non-Consulting Services¹ generated under the project and subject to International Competitive Bidding will be executed through the use of the Standard Bidding Documents (SBD) issued by the Bank. The processes subject to National Competitive Bidding (NCB) will be executed through the use of National Bidding Documents satisfactory to the Bank. The technical specifications review during the preparation of the selection process is the responsibility of the project sector specialist.
- 4.5 **Selection and Contracting of Consultants.** The consulting services contracts generated under this project will be selected and contracted using the Standard Request for Proposals (SRFP) issued by the Bank, when advertising at the international level and a document satisfactory to the Bank when advertising at the local level. The terms of reference review for the selection of consulting services is the responsibility of the project sector specialist.
- 4.6 **The single sole source** method for selection of an already identified firm for carrying out WSC's organizational development and implementation of the organizational restructuring strategy has been requested by the Borrower and recommended for approval by the project team based on the overall interests of project results and provisions in Bank policy. The firm is Castalia Strategic Advisors and the new contract for an estimated amount of US\$700,000. This contract will consist of the development and implementation of the WSC organizational structure per agreed strategy, benchmark performance standards for regulation by the Utilities Regulations and Competition Authority (URCA) and training of WSC staff. Consideration has been given to downstream work envisioned under the technical approach that has been proposed by the firm, its knowledge and experience acquired on WSC's organizational structure from prior work carried out for preparation of the sector plan, the legal and regulatory framework, and the proposal of the organizational restructuring strategy, currently in progress and being financed retroactively with project funds as indicated below. Given that participation of Castalia in a competitive process is allowed per Bank policy, there is a strong possibility that the contract would be awarded to this firm, therefore rendering neither more efficiency nor economy in the contracting process.
- 4.7 **Selection of Individual Consultants.** Contracts of individual consultants will be carried out using procedures per Section 5 of Policies GN-2350-9. Posting of opportunities for individual consultant contracts may be advertised internationally or locally in order to attract qualified individuals.
- 4.8 Training:
- a. Capacity will be transferred to WSC staff from the consultant that will supervise execution of the NRW Reduction contract in Component 1,

¹ Policies for the Procurement of Goods and Works Financed by the Inter-American Development Bank ([GN-2349-9](#)) paragraph 1.1: The services different to consulting services have a similar process as procurement of Goods.

including risks and implications contingent to the model selected and WSC staff to be assigned to the M&E activities to be performed at the PMU.

- b. Training will be provided to WSC staff during implementation of the Human Resources Reorganizational Structure within the scope of tasks in Component 2.

4.9 Recurrent Expenses. The project contains coverage of recurrent expenses that are required to start and maintain the project during execution and will be financed by the project within the annual budget approved by the Bank and Bahamas Financial Parameters. Among those identified there is funding for hiring consultants to assist the PMU in project management and supervision, monitoring and evaluation and contingent costs identified in the cost structure.

4.10 With the consent of the Bank, up to the equivalent of three hundred sixty three thousand dollars (US\$363,000) of the resources of the Financing may be used to reimburse expenditures incurred under the program for the preparation of the Organizational Restructuring Strategy of the WSC for a contract with Castalia Strategic Advisors. Said expenditures shall have been incurred before the date of Loan approval but after August 3rd, 2011 (date of Project Profile eligibility). Consideration was given to the award of the contract for sole source selection following the two previous contracts, mentioned in ¶2.19 above, for the same objective that were awarded in two competitive processes. This is consistent with the Bank's procurement policies for retroactive finance approval.

Thresholds (US\$ thousands)

Works			Goods ²			Consulting Services	
International Competitive Bidding	National Competitive Bidding	Shopping	International Competitive Bidding	National Competitive Bidding	Shopping	International Advertising	100% National Short List
≥3,000	150 - 3,000	≤150	≥150	50 - 150	≤50	>200	<200

Main Procurement Activities

Activity	Procurement Method	Estimated Date	Estimated Amount 000'US\$
Goods			
Works			
Rehabilitation Works for sanitary infrastructure	ICB	II Q 12	14,800
Non-consulting Services			
Public Relation Campaigns	NCB	I Q 12	1,500
Consulting Firms			
NRW Reduction Contract to address water losses in New Providence (consulting services with some civil engineering).	QBS	I Q 12	49,000
Wastewater Master Plan	QCBS	I Q 12	1,000
WSC Organizational Restructuring Strategy (retroactive financing)	SSS	II Q 11	363
WSC Organization Restructuring Implementation	SSS	I Q 12	700
Individual Consultants			

*To access the 18 month procurement plan, click [here](#)

² Including different services other than consulting.

B. Procurement Supervision

- 4.11 The supervision method for procurement execution will be established ex post, except when justified and as indicated. Project Procurement Ex post Reviews will be performed every 12 months and established in the Project Supervision plan. The ex post review reports will include at least one physical inspection visit³, chosen from the procurement processes subject to ex post review.

Threshold for Ex-Post Review		
Works	Goods	Consulting Services
≥3,000,000	≥1,000,000	>500,000

Note: The established threshold amounts for ex post review is applied based on the fiduciary capacity of the executing agency and can be modified by the Bank if the level of capacity varies.

- 4.12 **Special Stipulations.** The Bank has reviewed and been rendered satisfied with the international competitive bidding procurement process carried out for the NRW contract. Therefore, for purposes of this project, the Bank has communicated WSC its satisfaction of compliance with IDB Procurement Policies GN-2350-9 and procedures for the selection of the Consultants. This process is still pending of conclusion of negotiations with the awarded firm and negotiations in accordance with the NRW model contract that will be agreed with the Bank and selected for the project.

1. Records and Files

- 4.13 WSC and the PMU staff will arrange and put in force a dedicated space and a dedicated code assigned from its integrated filing system located in WSC offices for all the documentation related to the project. These instructions will be specified in the project's Operational Regulations Manual.

C. Financial Management

- 4.14 **Programming and Budget.** During its budget call the Budget Department of the Ministry of Finance sends out its circular including the required forms to be completed. The information is completed by the various Ministries and forms are returned to the Budget Department. At this stage the Budget Department must key in all of the information it receives from the various Ministries and Departments to complete the Budget call. Once the Budget has been approved, and the warrant issued by the Minister of Finance, an interface is done by the IT department to upload the information to the Treasury's system.
- 4.15 The Borrower has committed to allocate, for each fiscal year of project execution, adequate fiscal space to guarantee the unfettered execution of the project; as determined by normal operative instruments such as the Annual Operating Plan and the Procurement Plan.

³ The inspection visit verifies the existence of the procurement, leaving the verification of the quality and fulfillment of specifications to the sector specialist.

- 4.16 **Accounting and Information Systems.** The public financial system in The Bahamas is essentially a patchwork of other systems. While most Ministries have computer access, systems are not integrated; therefore information must be downloaded and submitted manually. The WSC uses financial management software, SUNGARD HTE System for its financial administration. This system seems adequate to carry out the accounting and control functions in the PMU. The project will follow International Accounting Standards (IAS).
- 4.17 **Disbursements and Funds Flows.** Whenever resources from the financing are requested through an Advance of Funds, they will be deposited into a Special Account, denominated in US Dollars, established exclusively for the Project at the Central Bank of Bahamas, or a Commercial Bank acceptable to the Bank. As required, resources from this Special Account will be transferred to another bank account in a commercial bank, denominated in Bahamian Dollars to be utilized for payment of expenditures in local currency.
- 4.18 The Executing Agencies commit to maintain strict control over the utilization of the Advances so as to ensure the easy verification and reconciliation of balances between the Executing Agency's records and IDB records (WLMS1).
- 4.19 Eligible expenditures, authorized by the PTL/Coordinator and incurred prior to the approval of this project will be reimbursed to the Borrower, in accordance with current Bank policy. The project will provide adequate justification of the existing Advance of Funds balance, whenever 80% of said balance has been spent. Advances will normally cover a period not exceeding 180 days and no less than 90 days.
- 4.20 In order to request disbursements from the Bank, the Executing Agency will present the following forms and supporting documents:

Type of Disbursement	Mandatory Forms	Optional forms/ information that can be requested by the IDB
Advance	Disbursement Request/ Financial Plan	List of Commitments Physical/Financial Progress Reports
Reimbursements of Payments Made	Disbursement Request/ Project Execution Status/ Statement of Expenses	List of Commitments Physical/Financial Progress Reports
Direct Payment to Supplier	Disbursement Request/ Acceptable Supporting Documentation	List of Commitments Physical/Financial Progress Reports

- 4.21 Supporting documentation for justification of advances and reimbursement of payments Made will be kept at the office of the PMU. Copies of the support documentation for direct payments will be sent to the Bank for processing. Disbursements' supporting documents may be reviewed by the Bank on an ex-post basis. These reviews do not entail a blanket approval, based on the samples reviewed, of the whole universe of expenditures.
- a. **Internal Control and Audit.** In the financial administration the internal control capacity is satisfactory, according to the ICAS; however, the internal control capacity of operational aspects is still an issue. WSC lacks adequate

monitoring and evaluation capacity and as such may lack the capacity to assess the efficiency and effectiveness of the NRW contract service delivery. The management of the project will assume the responsibility for designing and implementing a sound system of internal control for the project

- b. **External Control and Reporting.** There are four audit firms eligible to audit projects of high or lesser risk, one for medium or lesser risk projects and four eligible for only low risk projects. The Auditor General of Bahamas is currently eligible to audit new IDB projects on a case by case basis based on the risk of the project.
- c. For each fiscal year during project execution, the PMU will produce semi-annual financial reports for the project and annual Audited Financial Statements. The audit will be done by a firm of independent public accountants acceptable to the Bank. Currently the audit of the institution is done by PKF which has eligibility by the Bank to audit only TC. The audit will be financed from loan proceeds.
- d. **Financial Supervision Plan.** Financial Supervision will be developed based on the initial and subsequent risk assessments carried out for the project. Financial, Accounting and Institutional Inspection visits will be performed annually, covering the following: (i) review of the reconciliation and supporting documentation for advances and justifications; (ii) compliance with procedures; (iii) review of compliance with the lending criteria; and (iv) conducting ex post review of disbursements. The rigorousness of the supervision may be adjusted during the execution of the operation.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-__/11

Bahamas. Loan ____/OC-BH to the Water and Sewerage Corporation (WSC)
WSC Support Program – New Providence Water Supply and Sanitation
Systems Upgrade

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Water and Sewerage Corporation (WSC), as Borrower, and with The Commonwealth of The Bahamas, as Guarantor, for the purpose of granting the former a financing to cooperate in the execution of a WSC support program – New Providence water supply and sanitation systems upgrade. Such financing will be in the amount of up to US\$81,000,000 from the Single Currency Facility of the Ordinary Capital resources of the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on __ ____ 2011)