The Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)

Stakeholder Consultation Report

PlanEHS

Final Version
September 2024

Annex 5. Stakeholder Consultation Report

Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)

Table of Contents

Introduction

This report describes the preparation process and development of the Public Consultation of "The Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)", hereinafter "the Program".

The Program's objectives are to (a) improve coverage of potable water supply and wastewater services in New Providence and the Family Islands; (b) improve operational and financial performance by reducing Non-Revenue Water (NRW) in the Family Islands and increasing smart metering in New Providence; and (c) improve governance through institutional strengthening and supporting the modernization of the policy, legal and regulatory framework for WSC and the water and sanitation sector.

The program, with a total cost of **USD 50 million**, will be executed by the **Water and Sewerage Corporation (WSC)** and financed by the Inter-American Development Bank (IDB).

The Stakeholder Engagement Plan prepared as part of the Strategic Environmental and Social Assessment of the Program establishes the general principles of participation and collaborative

strategies to identify stakeholders and plan a participatory process in line with the Environmental and Social Performance Standard 10: **"Stakeholder Engagement and Information Disclosure"**, along with ESPS 1: **"Assessment and Management of Environmental and Social Risks and Impacts"** and ESPS 9 **"Gender Equality".**

To comply with IDB's ESPS 10 and its objective of an open and transparent engagement between the Borrower and Stakeholders, the following public consultation was conducted with institutional stakeholders during the preparation phase of the Program.

To conduct this process, the guide for Meaningful Consultation with Stakeholders (IDB, 2017) and the new Environmental and Social Policy Framework (ESPF) were taken as a reference, as well as the work team experience in the area.

Objective

The objective of the consultation process is to present to the affected population and other interested parties the description of the Project, its potential environmental and social impacts and the mitigation measures planned to ensure adequate environmental and social management during the execution of the works, and their subsequent operation.

This instance of participation aims to respond to the doubts and concerns that may arise, and to collect suggestions which will be evaluated in order to determine the possibility of incorporating them into the design of the Program, when appropriate.

The consultation also seeks to add value to the Program, which may happen by the following:

- Become aware of the **points of view and perceptions** of people who may be affected or who have an interest in a development project and provide a means for those opinions to be considered as contributions to improved Program design and implementation, which avoids or reduces adverse impacts and increases benefits.
- It constitutes an important source of **validation and verification of data** obtained elsewhere and improves the quality of environmental and social impact assessments.
- Helps people understand their **rights and responsibilities** in relation to the Program.
- Promotes greater transparency and stakeholder participation by increasing **trust, project acceptance and local ownership**, key aspects for Project sustainability and development results.
- It is conducted on an ongoing basis as risks and impacts arise; consider and address **feedback**
- It is a **requirement of the IDB** in accordance with environmental and social policies, in projects that have the potential to cause harm to people or the environment.
- It is essential for the **credibility and legitimacy** of the executing agencies and international financial institutions such as the IDB.
- Is free from all manipulation, interference, coercion, discrimination, retaliation and external intimidation

Public Consultation Process

Organization and Planning of the Consultation Process

The consultation process was designed based on the Stakeholder Engagement Plan developed in the Strategic Environmental and Social Assessment (SESA) of the Program during preparation phase, and the organizations involved were:

- Water and Sewerage Corporation (WSC)
- Inter-American Bank of Development (IBD)

The Public Consultation was performed in person and the general details of the event are described below:

Date and Time: August 27th, 9:00 am

Location: Bahamas Agricultural and Industrial Corporation (BAIC)

Stakeholder Mapping

Based on the preparation of the Environmental and Social Assessment (ESA), the possible adverse impacts were identified, as well as the risks, relevant opportunities, and the way in which they may affect different groups.

Based on these impacts, a specific analysis was conducted to identify stakeholders to invite them to participate in the participatory process throughout the Program cycle, and especially the founding milestone of this process, which is public consultation.

Key stakeholders were identified for the consultation and participation instance with the objective of ensuring that each of the identified groups are represented and can express their opinions.

From a preliminary identification, it emerged that, at a minimum, the stakeholders presented in Table 1 should be included in the process.

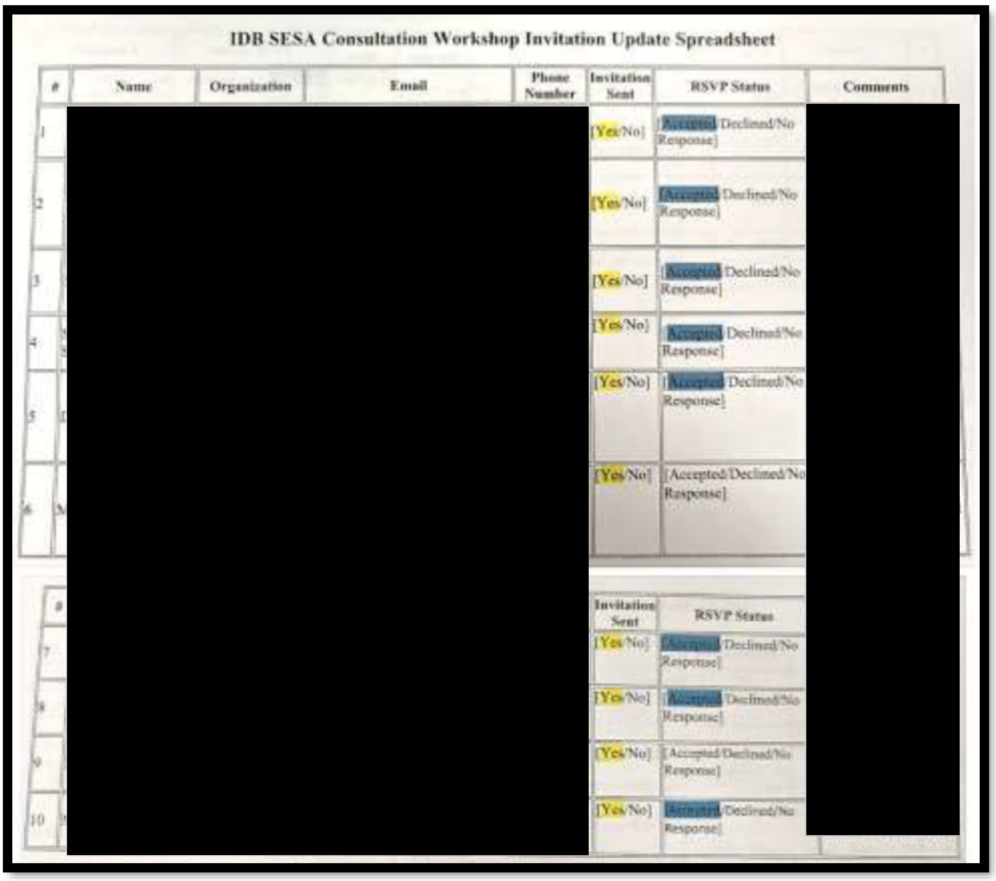
Type of Stakeholder	Stakeholder	Relationship with the Program/Project
Institutional Stakeholders	**WSC**	Executing Agency
	Department of Environmental Health Services (Family Islands Subdivisional Offices)	Interested party
	Department of Environmental Planning and Protection	Interested party
	Stakeholders related to other infrastructure and services in the project areas (e.g., Bahamas Power and Light Company, cable and internet companies, etc.)	Affected party
Civil Society Stakeholders	**Population living in the direct area of influence of the projects**	Affected party
	Businesses and informal workers in the direct area of influence of the projects	Affected party
	Representatives from institutions in the direct area of influence of the projects (e.g., schools, health centers, etc.)	Affected party
	Civil Society Organizations (in particular, those working in environmental and social issues)	Interested Party
Community	**Population of the communities reached by the Project and community in general** (indirect area of influence)	Interested Party

Table 1. Preliminary Stakeholder Mapping. Source: Environmental and Social Assessment and Environmental and Social Management Plan (Plan EHS)

It is important to note that the proposed stakeholder mapping was preliminary, and final selection of the stakeholders was adjusted by the WSC, the attendance sheets present in the Appendix show the final stakeholders present at the Consultation.

Invitations and Disclosure of Information

The invitations for the Consultation were sent via email by WSC to all identified institutional stakeholders. Figure 1 presents the list of invitees, as well as the RSVP status and comments.



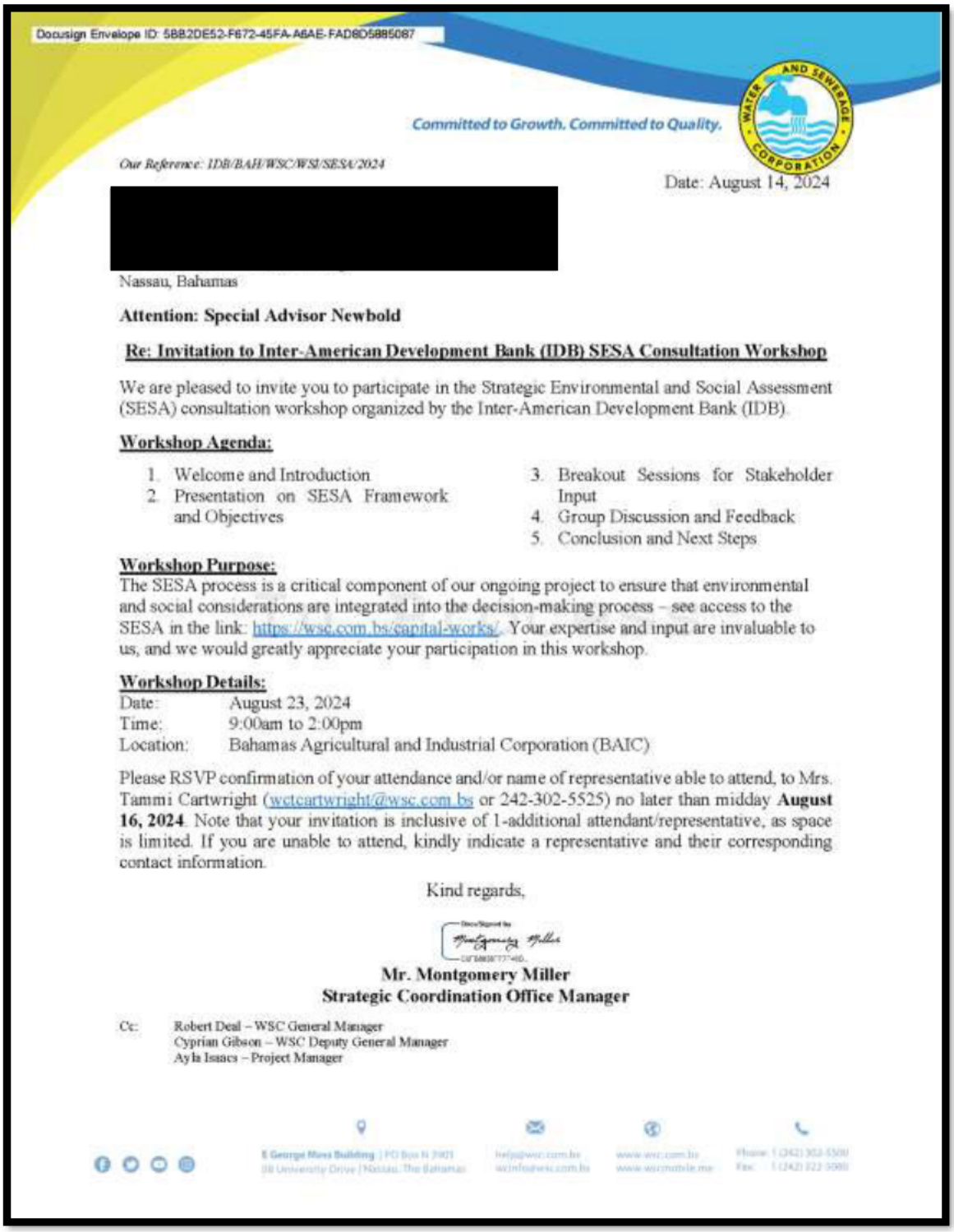
IDB SESA Consultation Workshop Invitation Update Spreadsheet

#	Name	Organization	Email	Phone Number	Invitation Sent	RSVP Status	Comments
1	[redacted]				[Yes/No]	[Accepted/Declined/No Response]	[redacted]
2					[Yes/No]	[Accepted/Declined/No Response]	
3					[Yes/No]	[Accepted/Declined/No Response]	
4					[Yes/No]	[Accepted/Declined/No Response]	
5					[Yes/No]	[Accepted/Declined/No Response]	
6					[Yes/No]	[Accepted/Declined/No Response]	
7					[Yes/No]	[Accepted/Declined/No Response]	
8					[Yes/No]	[Accepted/Declined/No Response]	
9					[Yes/No]	[Accepted/Declined/No Response]	
10					[Yes/No]	[Accepted/Declined/No Response]	

Figure 1. Consultation Invitations Update Spreadsheet[1]

Figure 2 presents a model letter of invitation used for this event.

[1] The list has been redacted for personal data privacy reasons in the public disclosure of this report, but full official records are kept by WSC and the IDB.



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Our Reference: IDB/BAH/WSC/WSI/SESA/2024

Date: August 14, 2024

[redacted]

Nassau, Bahamas

Attention: Special Advisor Newbold

Re: Invitation to Inter-American Development Bank (IDB) SESA Consultation Workshop

We are pleased to invite you to participate in the Strategic Environmental and Social Assessment (SESA) consultation workshop organized by the Inter-American Development Bank (IDB).

Workshop Agenda:

1. Welcome and Introduction
2. Presentation on SESA Framework and Objectives
3. Breakout Sessions for Stakeholder Input
4. Group Discussion and Feedback
5. Conclusion and Next Steps

Workshop Purpose:

The SESA process is a critical component of our ongoing project to ensure that environmental and social considerations are integrated into the decision-making process – see access to the SESA in the link: https://wsc.com.bs/capital-works/. Your expertise and input are invaluable to us, and we would greatly appreciate your participation in this workshop.

Workshop Details:

Date: August 23, 2024
Time: 9:00am to 2:00pm
Location: Bahamas Agricultural and Industrial Corporation (BAIC)

Please RSVP confirmation of your attendance and/or name of representative able to attend, to Mrs. Tammi Cartwright (wctcartwright@wsc.com.bs or 242-302-5525) no later than midday **August 16, 2024**. Note that your invitation is inclusive of 1-additional attendant/representative, as space is limited. If you are unable to attend, kindly indicate a representative and their corresponding contact information.

Kind regards,

Mr. Montgomery Miller
Strategic Coordination Office Manager

Cc: Robert Deal – WSC General Manager
Cyprian Gibson – WSC Deputy General Manager
Ayla Isaacs – Project Manager

Figure 2. Written letter of Invitation to Public Consultation.[2]

Disclosure of the Strategic Environmental and Social Analysis (SESA) was released on the IDB website under "The Bahamas Water Supply and Sanitation Systems Upgrade Program"

[2] Some data has been redacted for personal data privacy reasons in the public disclosure of this report, but full official records are kept by WSC and the IDB.

https://www.iadb.org/en/project/BH-L1061 (Figure 3), as well as through WSC's website (https://wsc.com.bs/capital-works/) (Figure 4).

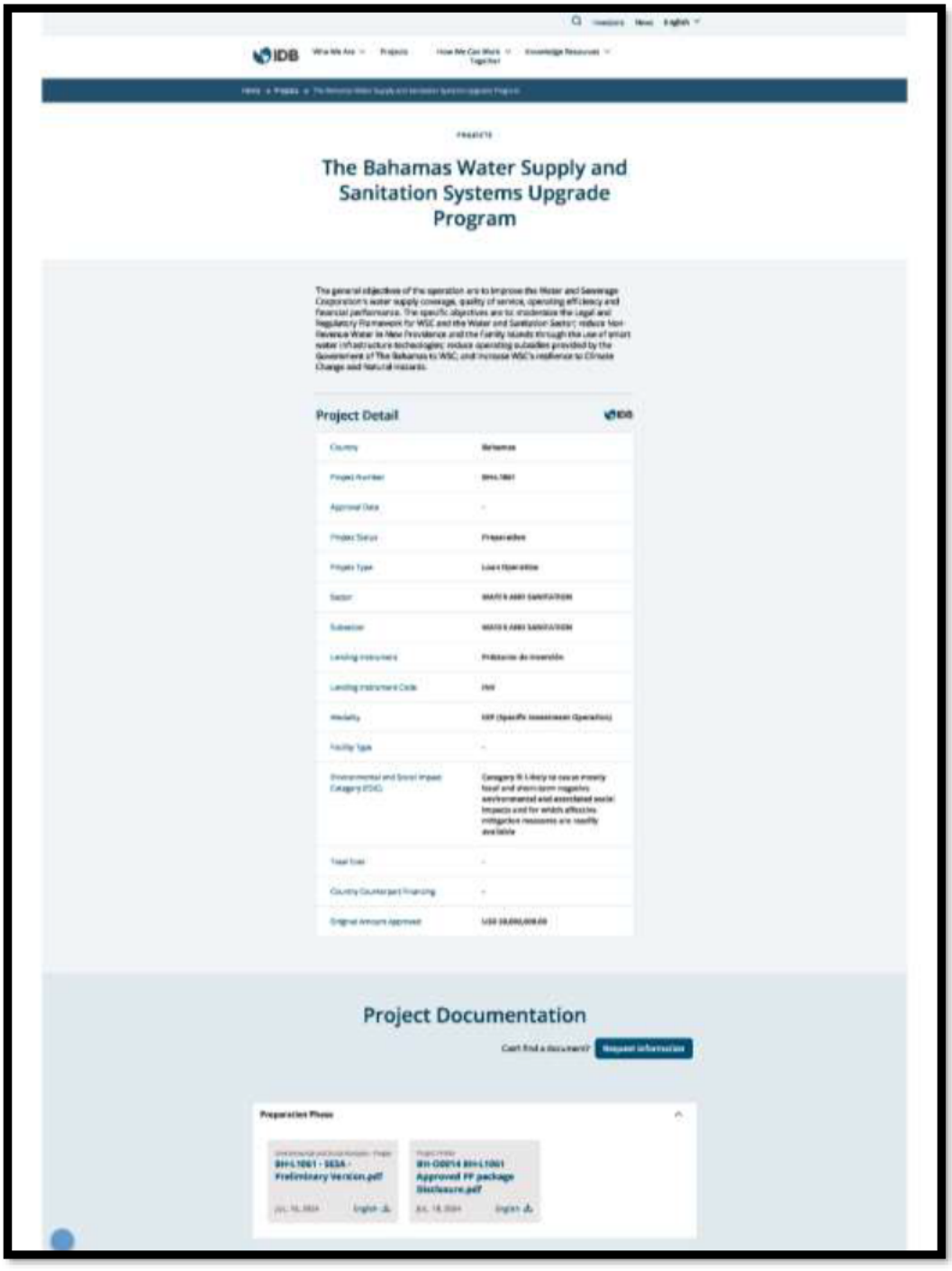


Figure 3. Publication of SESA available in https://www.iadb.org/en/project/BH-L1061

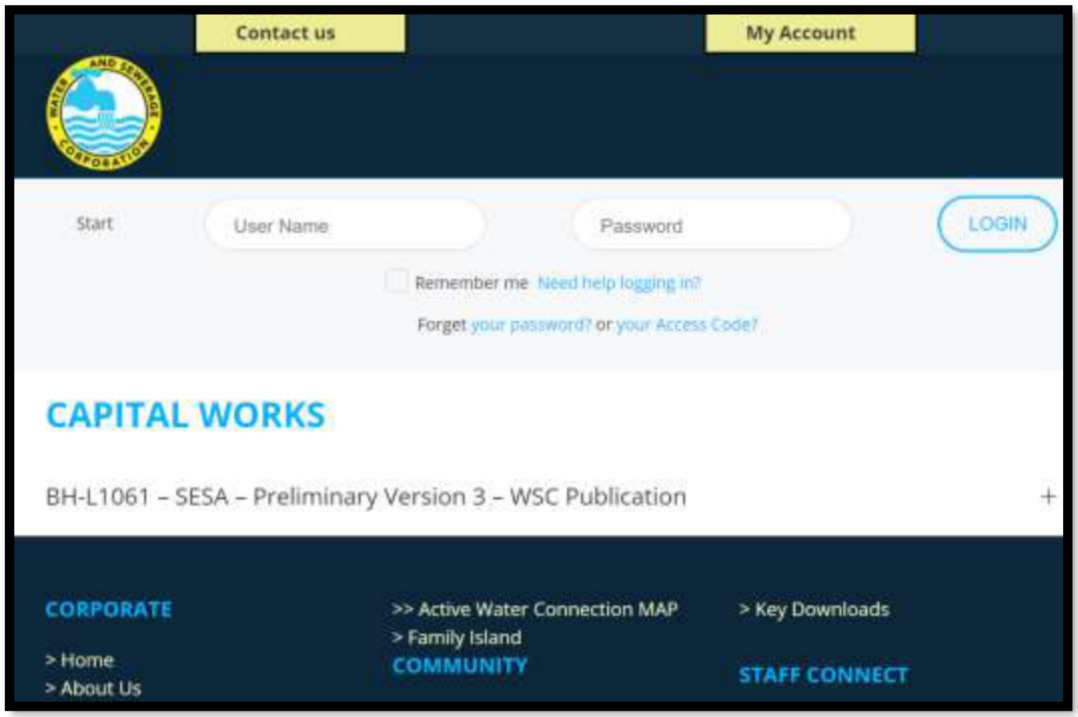


Figure 4 - Publication of the Strategic Environmental and Social Assessment at WSC's website[3]

Development of the Public Consultation Event

The consultation event was conducted in-person at the Bahamas Agricultural and Industrial Corporation (BAIC) (Old Trail Rd, Nassau, Bahamas), on August 27th, 2024, at 9 am.

The event was attended by a total of 15 participants representing institutional stakeholders from organizations such as the Department of Environmental Planning and Protection (DEPP), the Ministry of Works & Family Island Affairs, the Public Hospital Authority, BPL, MOETVT, the Forestry Unit, and WSC itself.

The process started at 09:15 am with Mr. Montgomery Miller, WSC Strategic Coordination Office Manager, giving opening remarks.

[3] Retrieved from https://wsc.com.bs/capital-works/, August 2024.

Figure 5. BAIC building, location where the Public Consultation was held.

Figure 6. Entrance to the event at the BAIC Building.

Figure 7. Conference Room at BAIC building

After a formal presentation of the authorities, Mr. Montgomery Miller thanked those present for participating in the consultation and introduced the Program.

Mr. Miller presented an overview of the Bahamas Water Supply and Sanitation Systems Upgrade Program, describing the objectives, and doing a description of the works to be implemented in the different components (**Figure 8**). He followed explaining the environmental and social assessment basis for the Program, as well as the roadmap and milestones for the operation.

Thereafter, Mr. Federico Scodelaro (environmental consultant) presented the overall objective of the consultation. He later discussed the environmental and social impacts (both negative and positive) and risks identified in the Strategic Environmental and Social Analysis for the construction and operational phase of the program, as well as the mitigation measures to be implemented in the Environmental and Social Management Plan. He introduced the Grievance Redress Mechanism and presented an email and telephone as communication channels to raise concerns, present claims, and inquiries throughout the project's life cycle.

Figure 8. Program and Project Description presentation

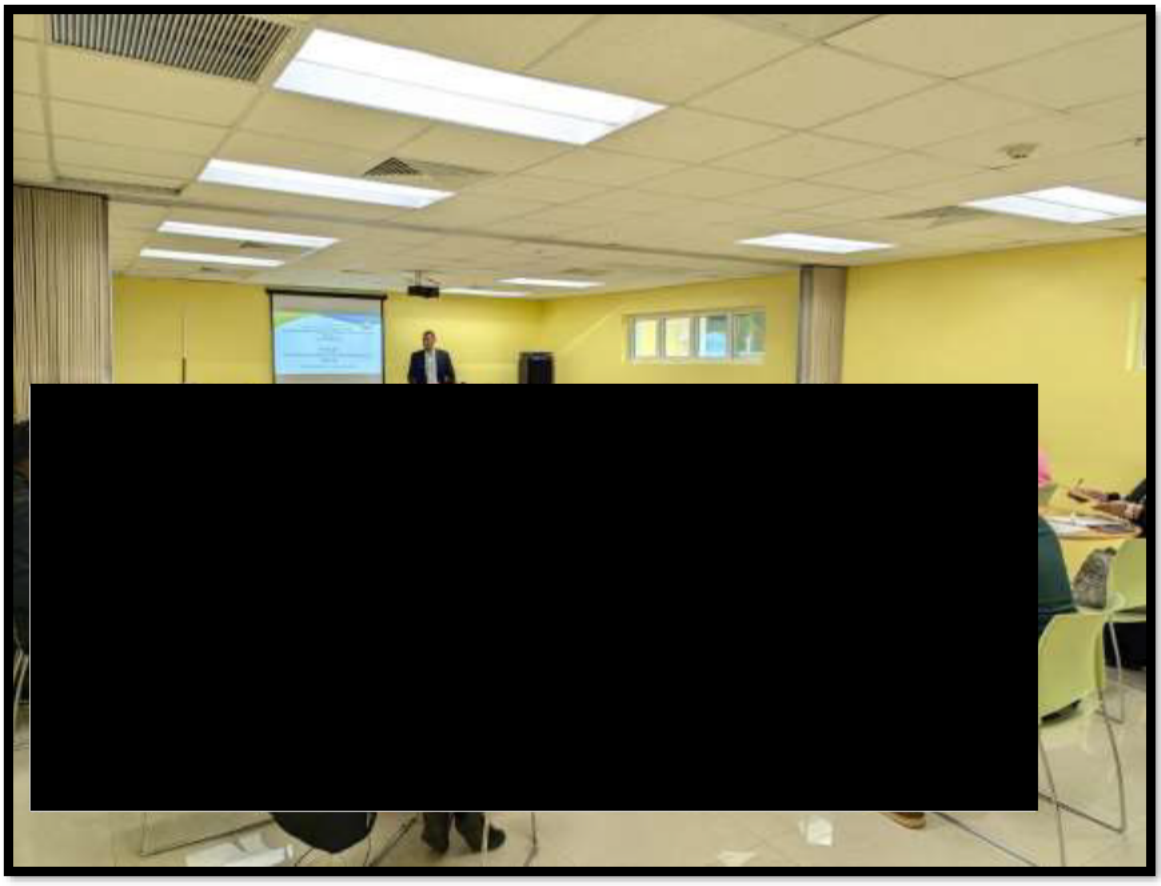


Figure 9. Public consultation event[4]

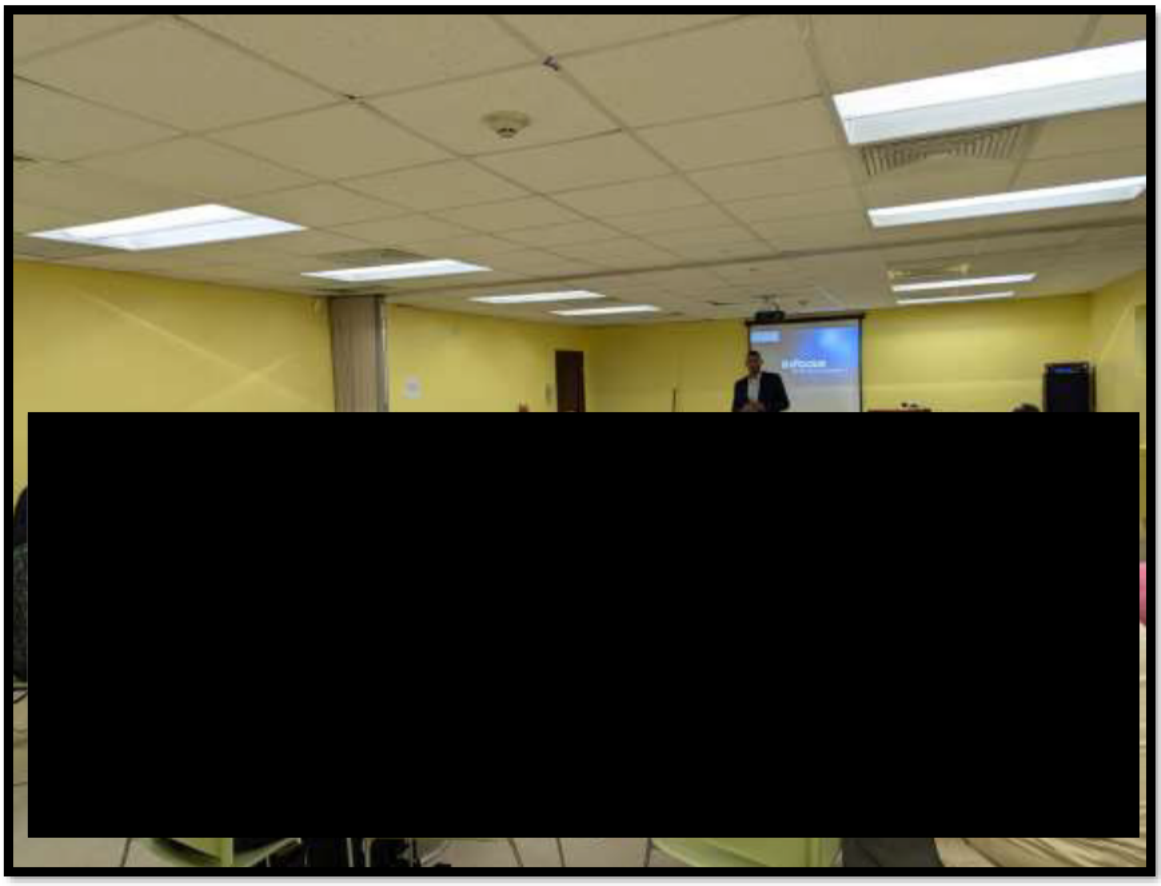


Figure 10. Public consultation event[5]

The presentations used during the event are included in **Appendix A.**

Throughout the presentations and after they were finished, there were several questions about the Program. These questions are presented in Table 2, along with the answers provided.

Table 2. Questions and Answers in the Public Consultation Event

N°	Questions/Commentary	Answers
1	Inquiries regarding how the beneficiary islands were selected for participation in the Program.	WSC explained that beneficiary islands were selected by their overall contribution to WSC's revenue.
2	Inquiries were made about whether pumping could reduce water quality.	WSC explained that it re-mineralizes water after it goes through the reverse osmosis (RO) process.

[4] Photo has been redacted for personal data privacy reasons in the public disclosure of this report, but full official records are kept by WSC and the IDB.

[5] Photo has been redacted for personal data privacy reasons in the public disclosure of this report, but full official records are kept by WSC and the IDB.

N°	Questions/Commentary	Answers
3	Questions were raised regarding which component is responsible for addressing the expansion of the water supply.	WSC explained that Component 3 will relate to the expansion of the water networks. The construction of new wells is not under the scope of this Program.
4	Concerns about Paradise Island water bills.	[this question falls outside of the scope of the Program]
6	It was asked whether there will be campaigns to transition from groundwater to piped service.	WSC explained that it will engage in campaigns for easing the transition from groundwater to piped service.
7	Suggestion to include the Ministry of Agriculture as a stakeholder in the Program given how agricultural activities affect water table (use of agricultural wells, pollution from agrochemicals, etc.)	WSC indicated that it would include the Ministry of Agriculture in future disclosures of information related to this Program.
8	Suggestion to include the National Statistical Institute as a stakeholder in the Program, due to the data that will be generated in the implementation.	WSC indicated that it would include the National Statistical Institute in future disclosures of information related to this Program.
9	Attendee praised WSC for modernizing water infrastructure and increasing access to water supply.	WSC thanked the comment.
10	Question on strategies to be used for adoption of piped service for people new to the service.	WSC expanded on lessons from previous water network expansions as well as communication efforts that will be developed to add users to the piped network, including use of social media.
11	Is there a plan to involve the public in the Program, such as townhall meetings?	WSC explained that this institutional consultation will be followed by specific consultations for each of the works under the Program, where interested and affected parties will participate.
13	Concerns were expressed about vandalism of pumps.	WSC explained that is planning to expand CCTV surveillance on key facilities to prevent / deter vandalism.
15	It was asked whether WSC will require additional staff for supervision of the works under the Program.	WSC explained that it underwent an exercise on institutional capacity assessment under the preparation of the Program, which included

N°	Questions/Commentary	Answers
		recommendations on capacity reinforcement. The scale of the individual works as well as the timelines of each intervention will determine the needs.
17	Question about the duration of the works.	WSC explained the approximate timelines for each component under the Program: • Comp. 1. NRW: 2-3 years • Comp. 3. Water supply: about 3 years for all works • Comp. 4. Lift station: installation works are fast (less than a week) but long lead up time in acquisition of equipment

After the question-and-answer segment, a refreshment break was taken. Upon returning from the break, an open opinion session was held for the various representatives of the institutions. The discussion covered mostly aspects not directly related to the scope of the Program, such as the plan and status of the well fields, as well as the onboarding process for the hydrologist. Additionally, topics related to the enforcement of regulations were discussed, emphasizing the need to build institutional capacity to ensure compliance.

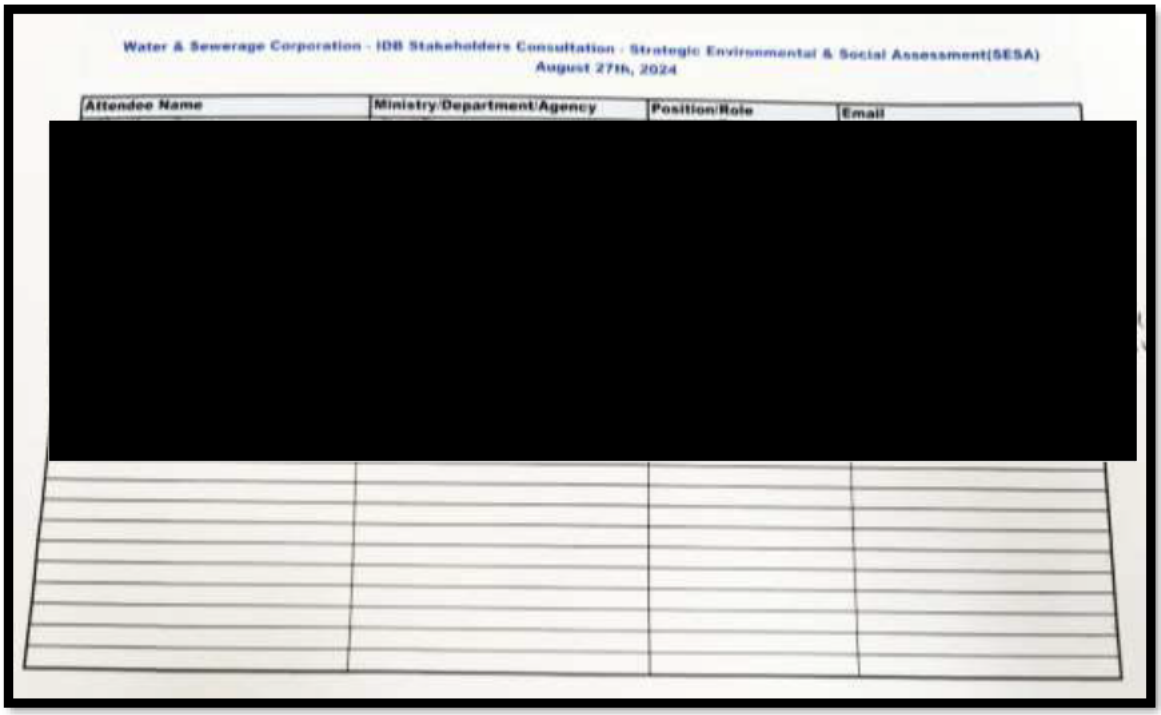
Conclusions from the Public Consultation Process

The main conclusions and recommendations from the stakeholder consultation are presented below:

- The Public Consultation was attended by representatives from various institutional stakeholders including the Water and Sewerage Corporation (WSC), the Department of Environmental Planning and Protection (DEPP), the Ministry of Works & Family Island Affairs, the Public Hospitals Authority, Bahamas Power and Light Company (BPL), the Ministry of Education, Technical and Vocational Training (MOETVT), and the Forestry Unit.
- The main concerns raised during the consultation were related to the Program's implementation and operational stages. Questions focused on the selection criteria for the beneficiary islands, water quality issues related to pumping and reverse osmosis processes, and the timeline of the various components, particularly the water supply expansion and lift station upgrades. Stakeholders also raised issues related to potential vandalism of pumps and the need of environmental monitors.
- There was a broad support for the works proposed in this project; the priorities and needs identified are aligned with the objectives of the proposed projects.
- Public consultation was planned and ordered, transparently and equitably and nondiscriminatory, providing information on the projects design and main significant environmental and social impacts and their mitigation measures.

Appendix A. Consultation Documents

Attendance Sheet from the in person Public Consultation [6]

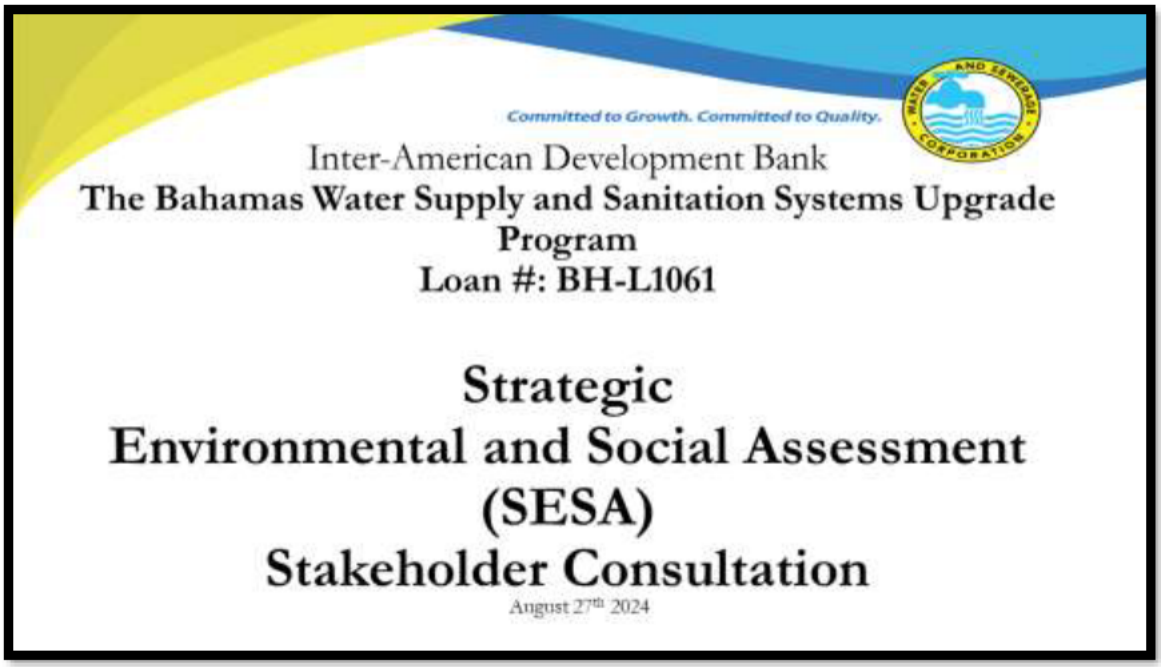


Water & Sewerage Corporation - IDB Stakeholders Consultation - Strategic Environmental & Social Assessment(SESA)
August 27th, 2024

Attendee Name	Ministry/Department/Agency	Position/Role	Email
[redacted]			

[6] Data has been redacted for personal data privacy reasons in the public disclosure of this report, but full official records are kept by WSC and the IDB.

Presentations used at the Consultation




BH-L1061 SESA
Project Overview
Committed to Growth. Committed to Quality.
The Bahamas is characterized as one of the most water-scarce Small Island Developing (SID)states in the world.
The Bahamas faces significant water supply challenges due to its limited availability of freshwater resources, exacerbated by climate change and population growth.
Water availability is low enough in The Bahamas to be considered scarce by the United Nations criteria.
The primary sources of water in The Bahamas are groundwater and rainwater, which are supplemented by desalination, particularly in more populous areas such as New Providence.
The Program total cost of USD 50 million, will be executed by the WSC and financed by the Inter-American Development Bank (IDB)
This Program is to help the Water and Sewerage Corporation (WSC) improve quality of service, operating efficiency, water supply coverage, and financial performance.
The general objective of this Strategic Environmental and Social Assessment (SESA) is to evaluate the environmental and social risks and impacts of the "Bahamas Water Supply and Sanitation Systems Upgrade Program (BH 1061)"


BH-L1061 SESA
Project Overview
Committed to Growth. Committed to Quality.
Project Specifics:
Project Name: The Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
Project Impacted Islands: Abaco, Bimini, Eleuthera, Exuma and New Providence
Project Value: $50 M (VAT inclusive)
Project Start Date: October 2024 (Board Approval)
December 2024 (Loan Contract Agreement Signature)
Proposed Project Duration: 5 Years
2024 - 2029


BH-L1061 SESA
Committed to Growth. Committed to Quality.
Program and Project Description
Component 1
Non-Revenue Water Reduction and Establishing Advanced Metering Infrastructure
• Address physical and commercial losses in the Family Islands focusing on Abaco, Eleuthera, and Exuma
• 65,000 Advanced Metering Infrastructure (AMI) in New Providence and the Family Islands, including Abaco, Eleuthera, and Exuma
• Est. US$33.0 Million
Component 2
Institutional Strengthening
• The Utilities Regulation and Competition Authority (URCA) as proposed economic regulator of the water and sewerage sector;
• The Department of Environmental Planning and Protection (DEPP)
• Modernization of the policy, legal and regulatory framework
• Est. US$3.5 Million
Component 3
Access to Potable Water Supply
• The Abaco new water mains installation at Sweeting's Tract;
• The South Bimini Port Royal Water Main Extension;
• The South Bimini mains extension to Airport
• New Providence Side Roads
• US$ 8.0 Million
Component 4
Wastewater Collection and Treatment Facilities Upgrade
• Replacement and upgrade of 19 existing lift station pumps, control panels, electrical and Supervisory Control and Data Acquisition (SCADA) components
• US$3.0 Million


BH-L1061 SESA
Committed to Growth. Committed to Quality.
SESA Specific Objectives
The general objective of this Strategic Environmental and Social Assessment (SESA) is to evaluate the environmental and social risks and impacts of the "Bahamas Water Supply and Sanitation Systems Upgrade Program (BH L1061)"
Objective 1
Conduct the expedited diagnosis of the Environmental and Social Baseline of the Project Intervention Areas, as well as the legal and institutional regulatory framework. Institutional outlines the legal, sectoral, and institutional framework of the projects, taking into account environmental, social, occupational health, and safety areas.
Objective 2
Identify and assess the main environmental and social impacts and risks on the physical, biological, and socioeconomic environment, in the Construction, Operation and Closing stages of the program.
Objective 3
Identify the mitigation measures and management procedures to minimize the impacts and risks assessed and outline the contents of the Project's Environmental and Social Management Plan.


BH-L1061 SESA
Committed to Growth. Committed to Quality.
Environmental & Social Impact Risk
Strategic Environmental & Social Management Plan
Environmental & Social Baseline
Stakeholder Engagement Plan
Legal and Institutional Framework
SESA Framework
Labor Management Procedures


BH-L1061 SESA
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Legal & Institutional Framework
Legal and Institutional Framework Outlines the legal, sectoral and institutional framework of the Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061), considering environmental, social and occupational health and safety areas.
National Legal Framework
• The legal framework is described based on 17 Environmental Regulations that apply to the program. Due to the extensive number of regulations, the following 5 slides were compiled to outline the 24 International Agreements and the 73 Bahamian National Environmental laws, applicable to this program. A detailed summary of each legislation and agreement can be found on our website(wsc.com.bs)
Institutional Framework
• The Institutional Framework composes of 10 Environmental and Social Performance Standards (ESPS) that are apart of IDB's Environmental and Social Policy Framework (ESPF). As The Bahamas Water Supply and Sanitation System Upgrade Program (BH-L1061) is being financed by IDB, the IDB Environmental and Social Policy Framework applies to the Program.

BH-L1061 SESA

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Stakeholder Mapping

Type of Stakeholder	Stakeholder	Relationship with the Program/Project	Stakeholder interest in the Project (high / medium / low)	Stakeholder influence on Project (high / medium / low)
	WSC	Executing Agency	High	High
Institutional Stakeholders	**Department of Environmental Health Services** (Family Islands Subdivisional Offices)	Interested party	Low	Low
	Department of Environmental Planning and Protection	Interested party	Low	Medium
	Office of the Prime Minister (OPM)/Climate Division	Interested party	Medium	Medium
	Department of Meteorology	Interested party	Low	Low
	Disaster Risk Managemetn Authority	Interested party	Low	Medium
	Forestry Unit	Interested party	Low	Medium
	Stakeholders related to other infrastructure and services in the project areas (e.g., Bahamas Power and Light Company, cable and internet companies, etc.)	Affected party	Medium	Low
Civil Society Stakeholders	**Population living in the direct area of influence of the projects**	Affected party	High	Medium
	Businesses and informal workers in the direct area of influence of the projects	Affected party	High	Medium
	Public Hospital Authority	Affected party	Low	Medium
	Ministry of Education	Affected party	Low	Low
	Representatives from institutions in the direct area of influence of the projects (e.g., schools, health centers, etc.)	Affected party	Medium	Medium
	Civil Society Organizations (in particular, those working in environmental and social issues)	Interested Party	Medium	Low
Community	**Population of the communities reached by the Project and community in general** (indirect area of influence)	Interested Party	Medium	Low

BH-L1061 SESA

TIMELINE AND ROADMAP

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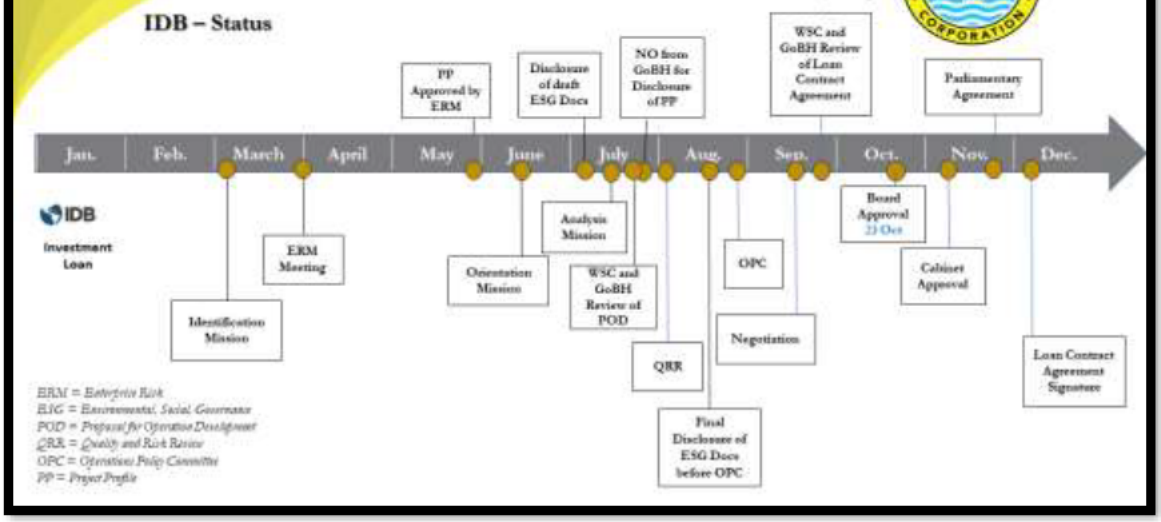
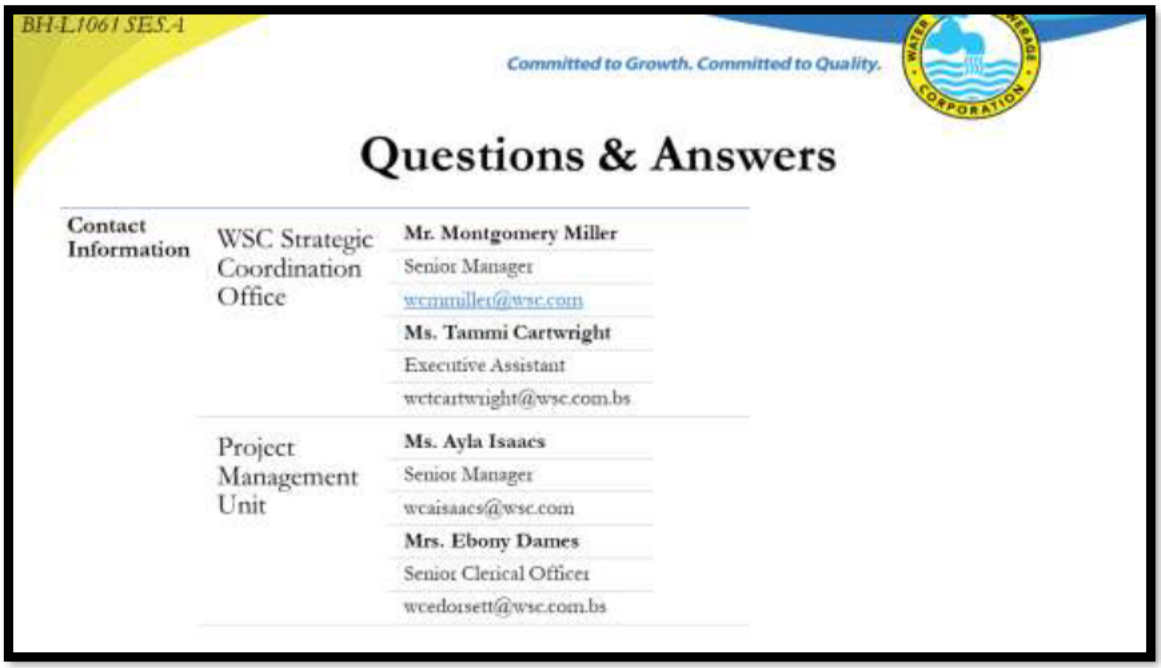
IDB – Status



ERM = Enterprise Risk
ESG = Environmental, Social, Governance
POD = Proposal for Operation Development
QRR = Quality and Risk Review
OPC = Operations Policy Committee
PP = Project Profile


BH-L1061 SESA
Committed to Growth. Committed to Quality.
Questions & Answers
Contact Information
WSC Strategic Coordination Office
Mr. Montgomery Miller
Senior Manager
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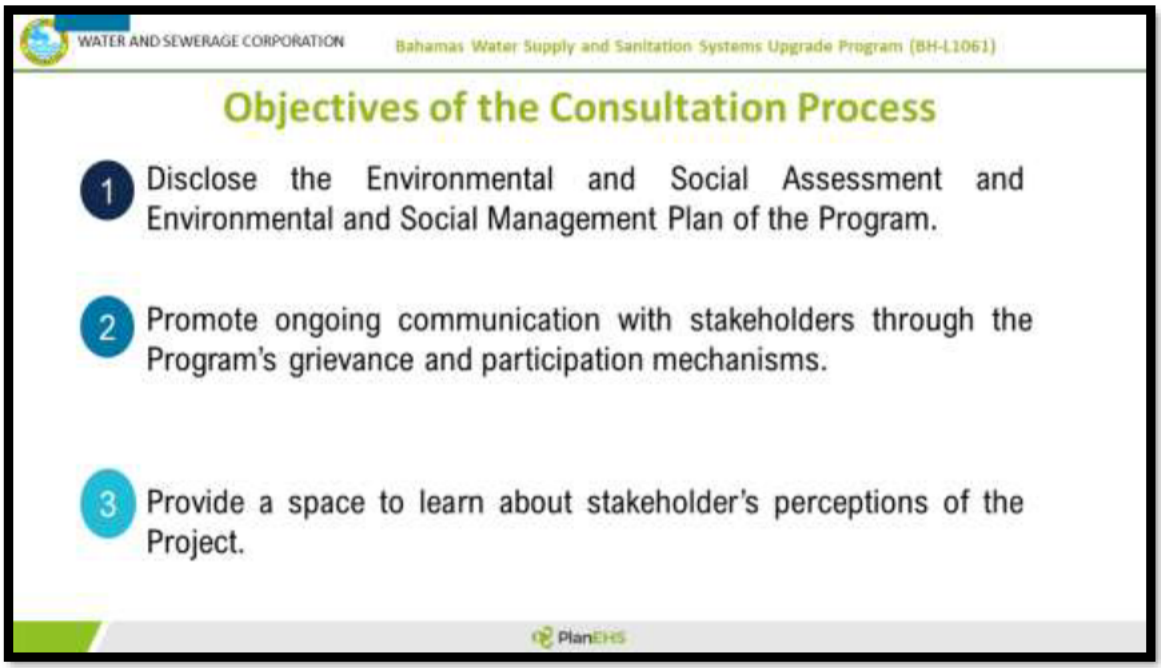
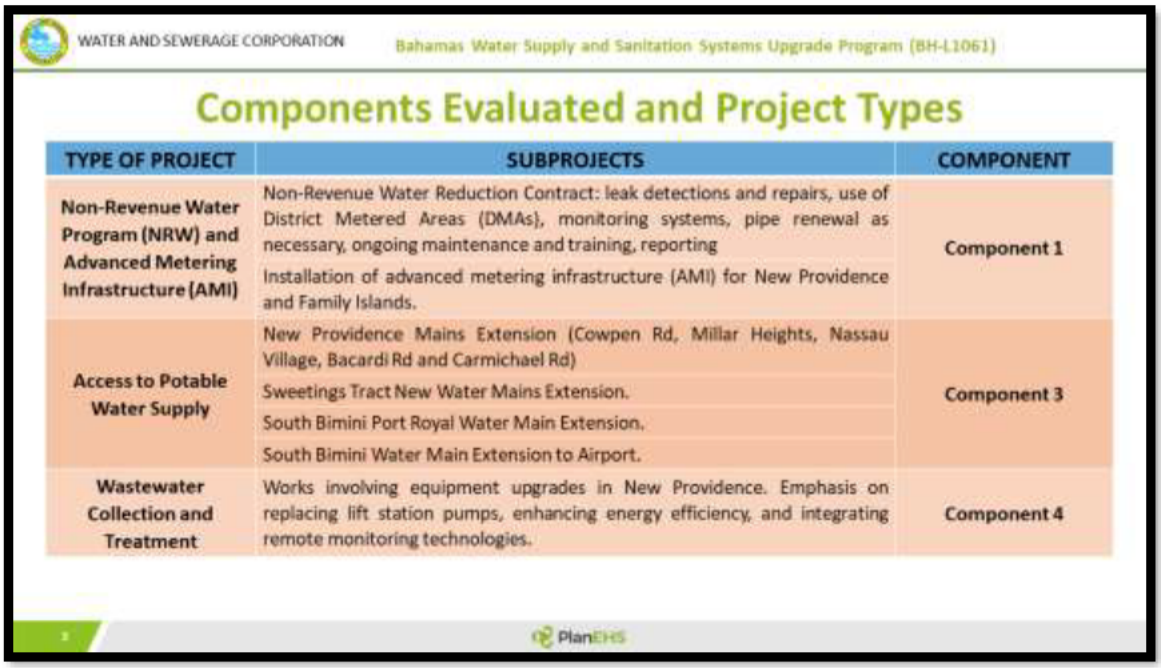
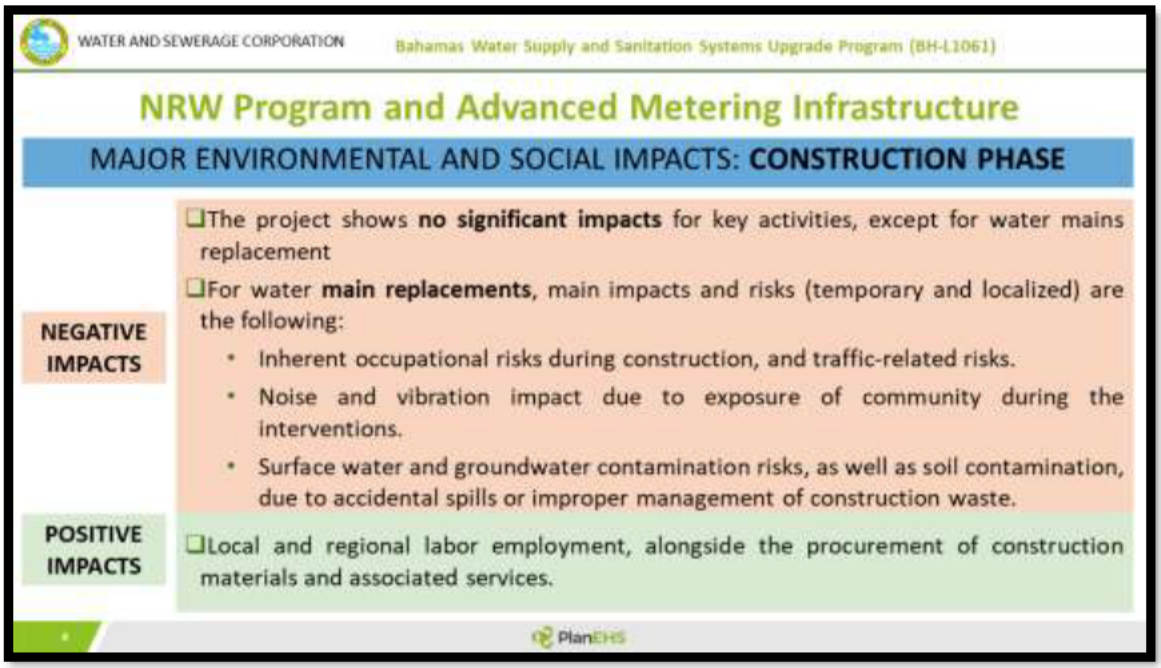
Ms. Tammi Cartwright
Executive Assistant
wctcartwright@wsc.com.bs
Project Management Unit
Ms. Ayla Isaacs
Senior Manager
wcaisaacs@wsc.com
Mrs. Ebony Dames
Senior Clerical Officer
wcedorsett@wsc.com.bs


Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
Environmental and Social Aspects


WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
Objectives of the Consultation Process
1 Disclose the Environmental and Social Assessment and Environmental and Social Management Plan of the Program.
2 Promote ongoing communication with stakeholders through the Program's grievance and participation mechanisms.
3 Provide a space to learn about stakeholder's perceptions of the Project.
PlanEHS


WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
Components Evaluated and Project Types
TYPE OF PROJECT
SUBPROJECTS
COMPONENT
Non-Revenue Water Program (NRW) and Advanced Metering Infrastructure (AMI)
Non-Revenue Water Reduction Contract: leak detections and repairs, use of District Metered Areas (DMAs), monitoring systems, pipe renewal as necessary, ongoing maintenance and training, reporting
Installation of advanced metering infrastructure (AMI) for New Providence and Family Islands.
Component 1
Access to Potable Water Supply
New Providence Mains Extension (Cowpen Rd, Millar Heights, Nassau Village, Bacardi Rd and Carmichael Rd)
Sweetings Tract New Water Mains Extension.
South Bimini Port Royal Water Main Extension.
South Bimini Water Main Extension to Airport.
Component 3
Wastewater Collection and Treatment
Works involving equipment upgrades in New Providence. Emphasis on replacing lift station pumps, enhancing energy efficiency, and integrating remote monitoring technologies.
Component 4
PlanEHS


WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
NRW Program and Advanced Metering Infrastructure
MAJOR ENVIRONMENTAL AND SOCIAL IMPACTS: CONSTRUCTION PHASE
NEGATIVE IMPACTS
The project shows no significant impacts for key activities, except for water mains replacement
For water main replacements, main impacts and risks (temporary and localized) are the following:
Inherent occupational risks during construction, and traffic-related risks.
Noise and vibration impact due to exposure of community during the interventions.
Surface water and groundwater contamination risks, as well as soil contamination, due to accidental spills or improper management of construction waste.
POSITIVE IMPACTS
Local and regional labor employment, alongside the procurement of construction materials and associated services.
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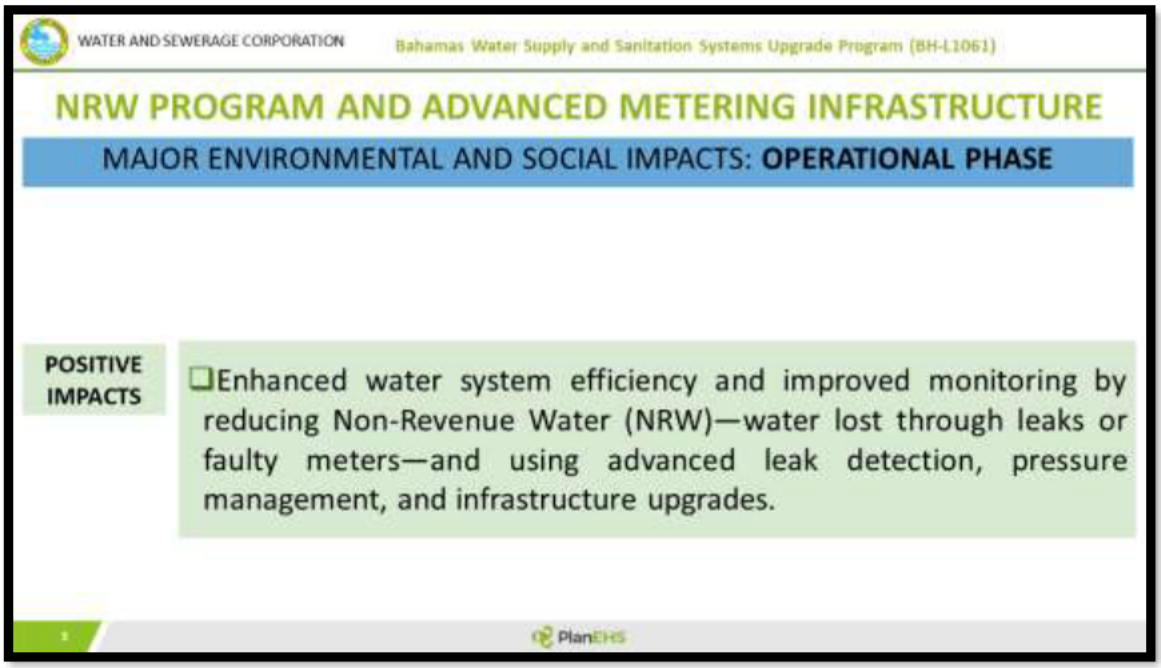
WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
NRW PROGRAM AND ADVANCED METERING INFRASTRUCTURE
MAJOR ENVIRONMENTAL AND SOCIAL IMPACTS: OPERATIONAL PHASE
POSITIVE IMPACTS
Enhanced water system efficiency and improved monitoring by reducing Non-Revenue Water (NRW)—water lost through leaks or faulty meters—and using advanced leak detection, pressure management, and infrastructure upgrades.
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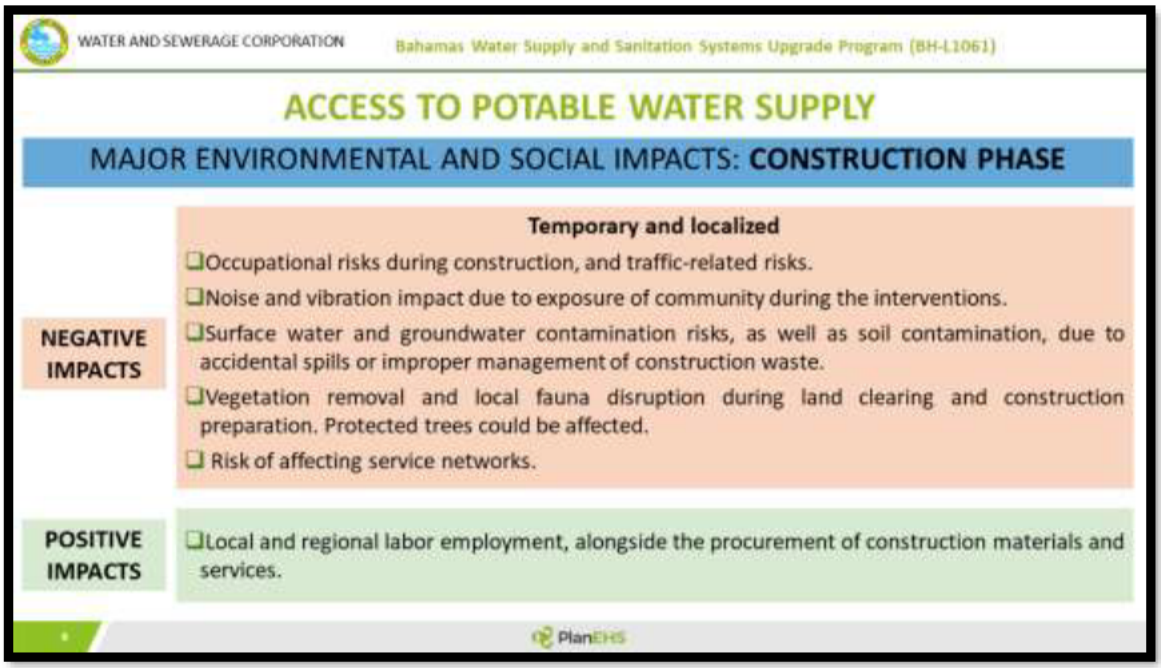
WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
ACCESS TO POTABLE WATER SUPPLY
MAJOR ENVIRONMENTAL AND SOCIAL IMPACTS: CONSTRUCTION PHASE
NEGATIVE IMPACTS
Temporary and localized
Occupational risks during construction, and traffic-related risks.
Noise and vibration impact due to exposure of community during the interventions.
Surface water and groundwater contamination risks, as well as soil contamination, due to accidental spills or improper management of construction waste.
Vegetation removal and local fauna disruption during land clearing and construction preparation. Protected trees could be affected.
Risk of affecting service networks.
POSITIVE IMPACTS
Local and regional labor employment, alongside the procurement of construction materials and services.
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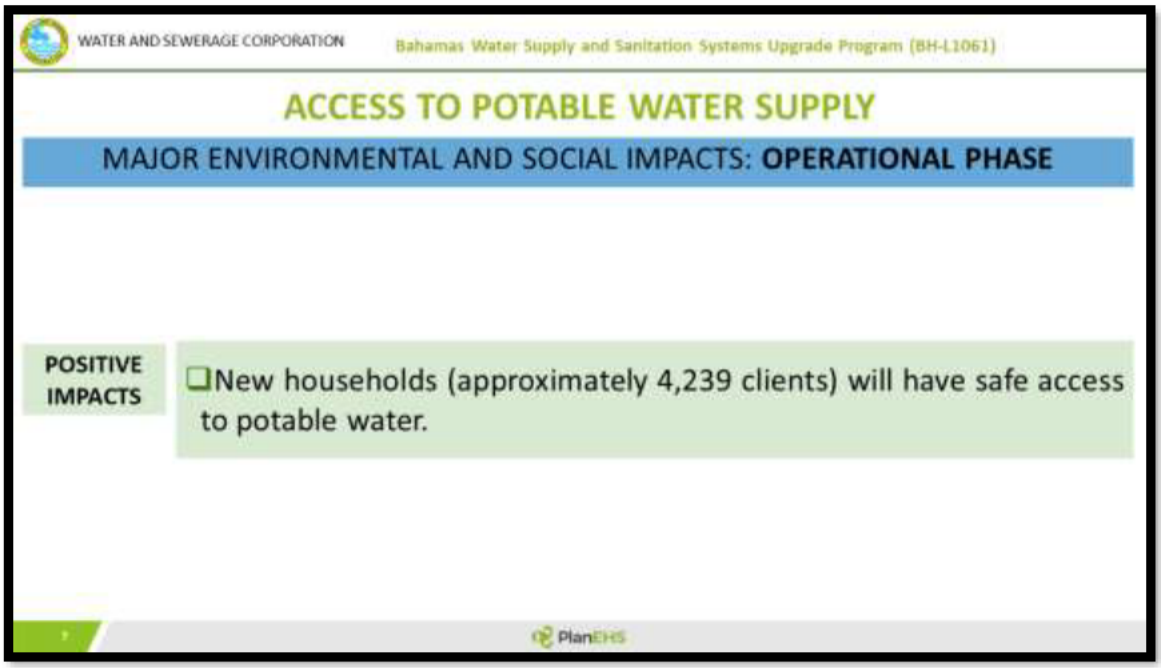
WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
ACCESS TO POTABLE WATER SUPPLY
MAJOR ENVIRONMENTAL AND SOCIAL IMPACTS: OPERATIONAL PHASE
POSITIVE IMPACTS
New households (approximately 4,239 clients) will have safe access to potable water.
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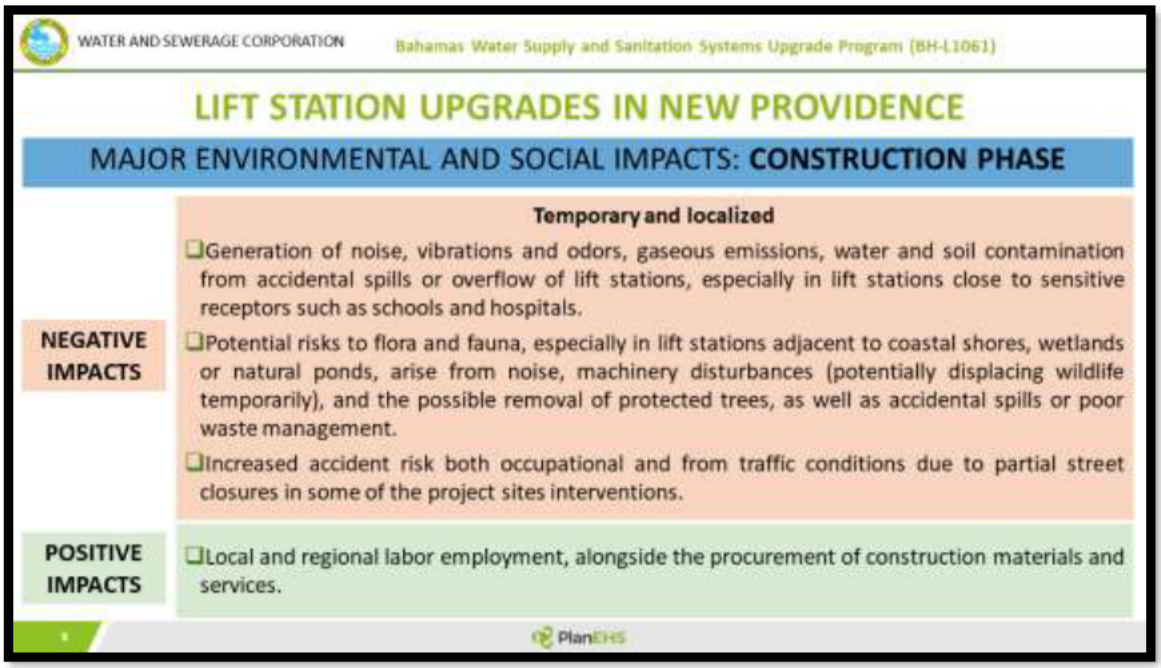
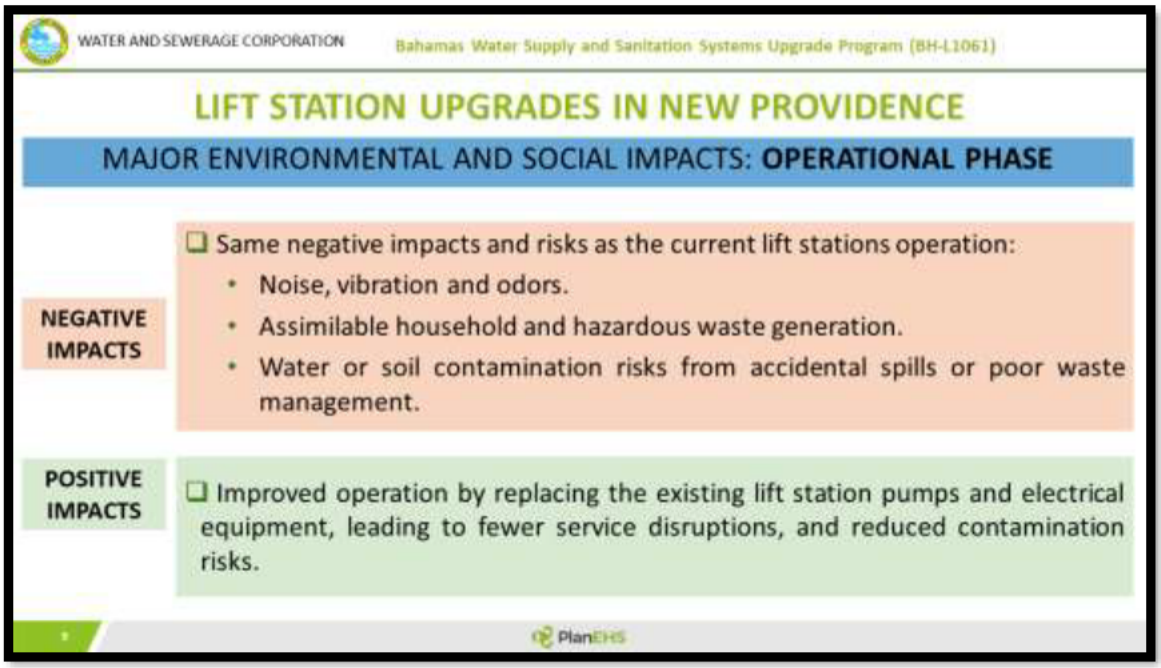

WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
LIFT STATION UPGRADES IN NEW PROVIDENCE
MAJOR ENVIRONMENTAL AND SOCIAL IMPACTS: CONSTRUCTION PHASE
Temporary and localized
NEGATIVE IMPACTS
Generation of noise, vibrations and odors, gaseous emissions, water and soil contamination from accidental spills or overflow of lift stations, especially in lift stations close to sensitive receptors such as schools and hospitals.
Potential risks to flora and fauna, especially in lift stations adjacent to coastal shores, wetlands or natural ponds, arise from noise, machinery disturbances (potentially displacing wildlife temporarily), and the possible removal of protected trees, as well as accidental spills or poor waste management.
Increased accident risk both occupational and from traffic conditions due to partial street closures in some of the project sites interventions.
POSITIVE IMPACTS
Local and regional labor employment, alongside the procurement of construction materials and services.
PlanEHS


WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
LIFT STATION UPGRADES IN NEW PROVIDENCE
MAJOR ENVIRONMENTAL AND SOCIAL IMPACTS: OPERATIONAL PHASE
NEGATIVE IMPACTS
Same negative impacts and risks as the current lift stations operation:
Noise, vibration and odors.
Assimilable household and hazardous waste generation.
Water or soil contamination risks from accidental spills or poor waste management.
POSITIVE IMPACTS
Improved operation by replacing the existing lift station pumps and electrical equipment, leading to fewer service disruptions, and reduced contamination risks.
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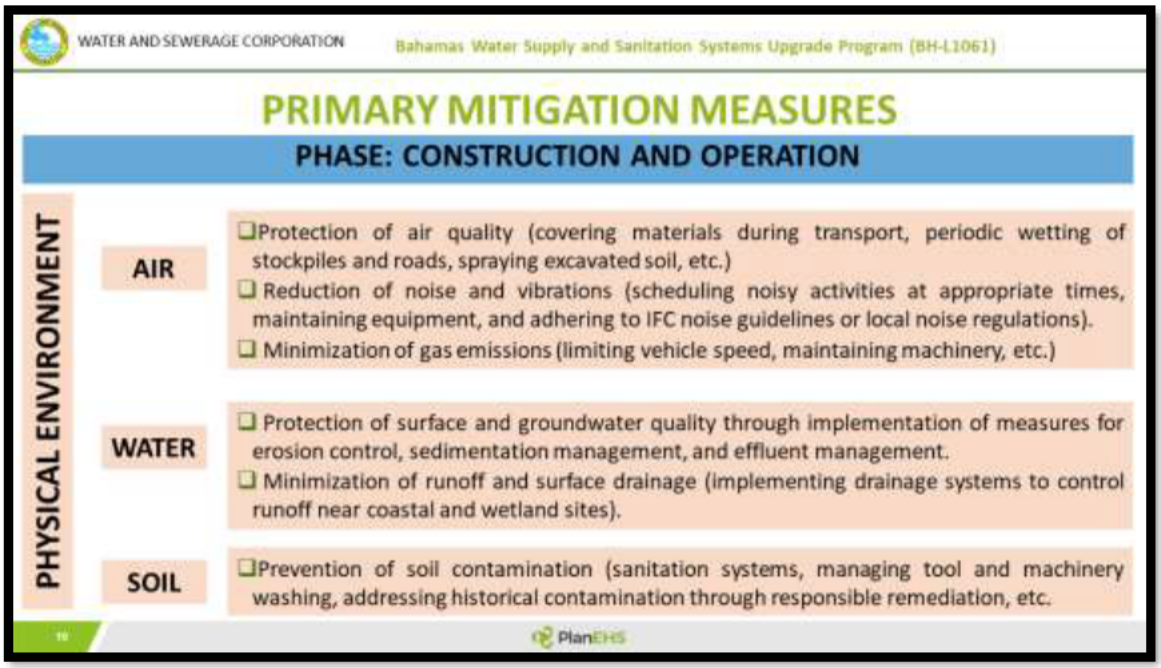
WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
PRIMARY MITIGATION MEASURES
PHASE: CONSTRUCTION AND OPERATION
PHYSICAL ENVIRONMENT
AIR
Protection of air quality (covering materials during transport, periodic wetting of stockpiles and roads, spraying excavated soil, etc.)
Reduction of noise and vibrations (scheduling noisy activities at appropriate times, maintaining equipment, and adhering to IFC noise guidelines or local noise regulations).
Minimization of gas emissions (limiting vehicle speed, maintaining machinery, etc.)
WATER
Protection of surface and groundwater quality through implementation of measures for erosion control, sedimentation management, and effluent management.
Minimization of runoff and surface drainage (implementing drainage systems to control runoff near coastal and wetland sites).
SOIL
Prevention of soil contamination (sanitation systems, managing tool and machinery washing, addressing historical contamination through responsible remediation, etc.
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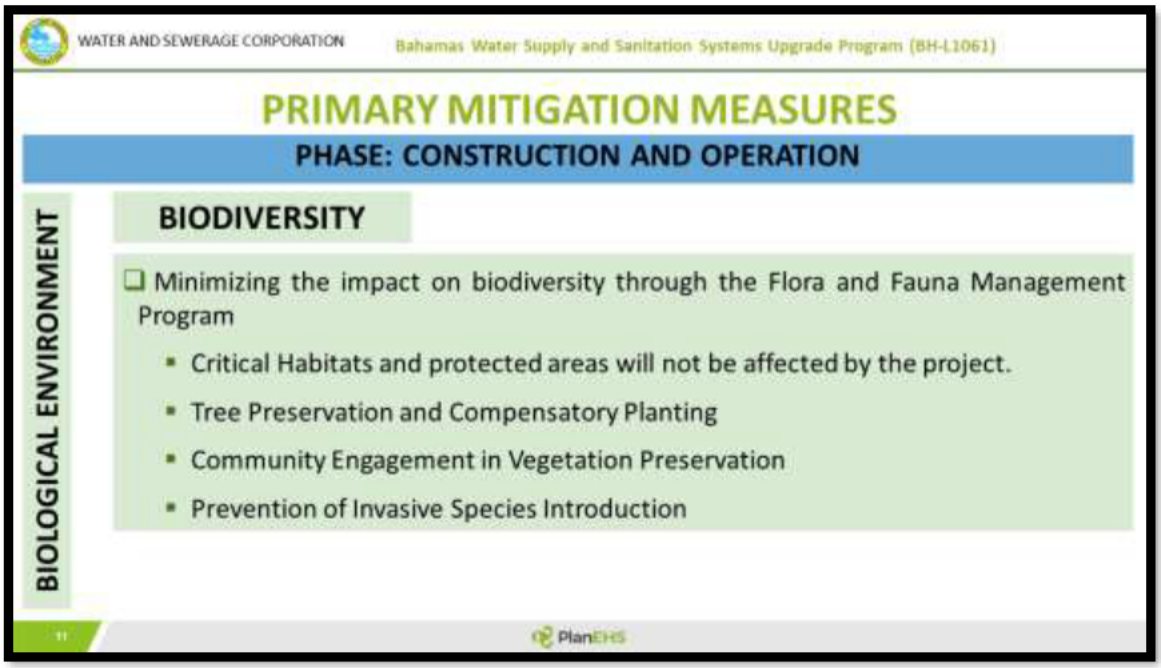
WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
PRIMARY MITIGATION MEASURES
PHASE: CONSTRUCTION AND OPERATION
BIOLOGICAL ENVIRONMENT
BIODIVERSITY
Minimizing the impact on biodiversity through the Flora and Fauna Management Program
Critical Habitats and protected areas will not be affected by the project.
Tree Preservation and Compensatory Planting
Community Engagement in Vegetation Preservation
Prevention of Invasive Species Introduction
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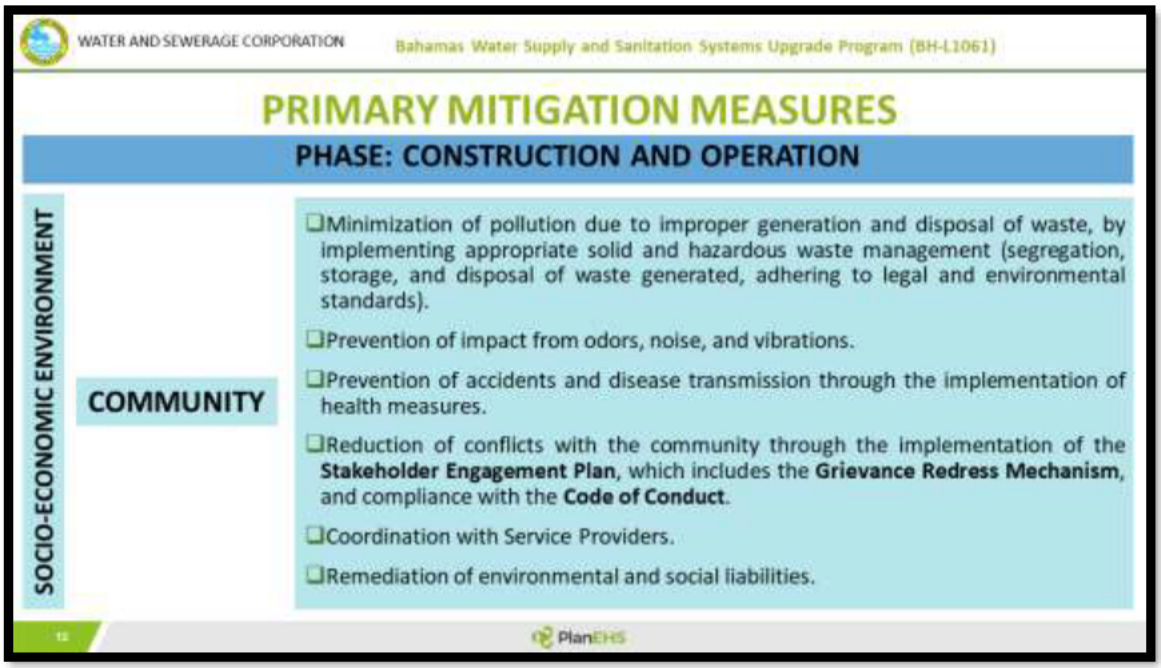
WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
PRIMARY MITIGATION MEASURES
PHASE: CONSTRUCTION AND OPERATION
SOCIO-ECONOMIC ENVIRONMENT
COMMUNITY
Minimization of pollution due to improper generation and disposal of waste, by implementing appropriate solid and hazardous waste management (segregation, storage, and disposal of waste generated, adhering to legal and environmental standards).
Prevention of impact from odors, noise, and vibrations.
Prevention of accidents and disease transmission through the implementation of health measures.
Reduction of conflicts with the community through the implementation of the Stakeholder Engagement Plan, which includes the Grievance Redress Mechanism, and compliance with the Code of Conduct.
Coordination with Service Providers.
Remediation of environmental and social liabilities.
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WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
PRIMARY MITIGATION MEASURES
PHASE: CONSTRUCTION AND OPERATION
SOCIO-ECONOMIC ENVIRONMENT
WORKFORCE
❑ Prevention of workplace accidents and disease transmission through socio-environmental training for construction personnel.
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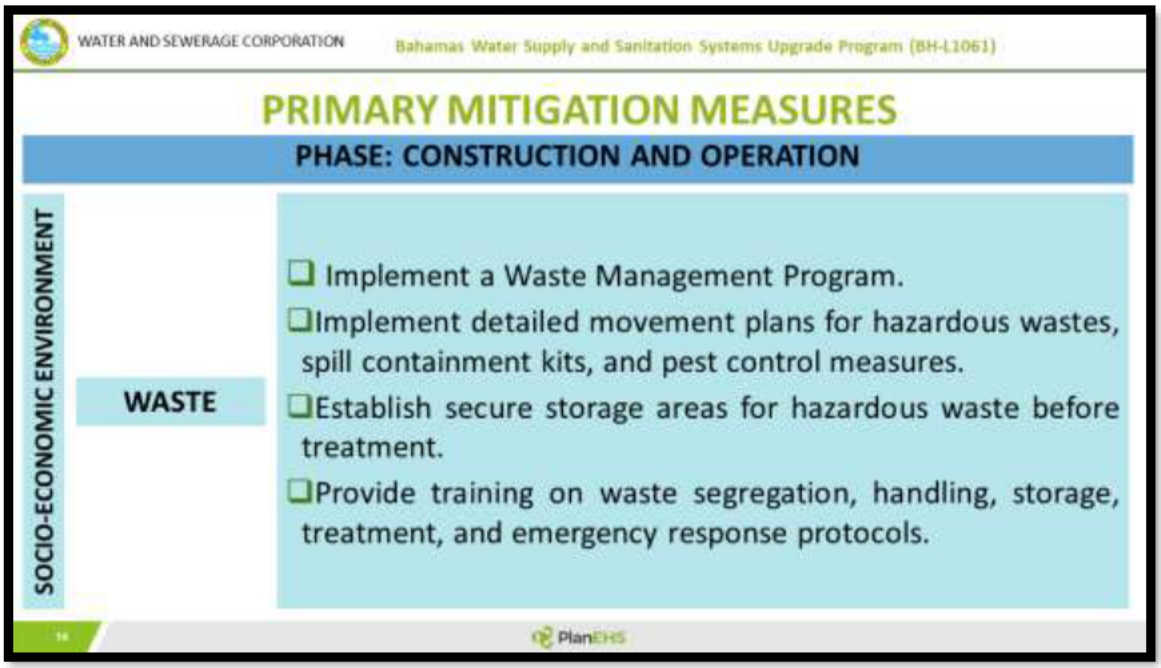
WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
PRIMARY MITIGATION MEASURES
PHASE: CONSTRUCTION AND OPERATION
SOCIO-ECONOMIC ENVIRONMENT
WASTE
❑ Implement a Waste Management Program.
❑Implement detailed movement plans for hazardous wastes, spill containment kits, and pest control measures.
❑Establish secure storage areas for hazardous waste before treatment.
❑Provide training on waste segregation, handling, storage, treatment, and emergency response protocols.
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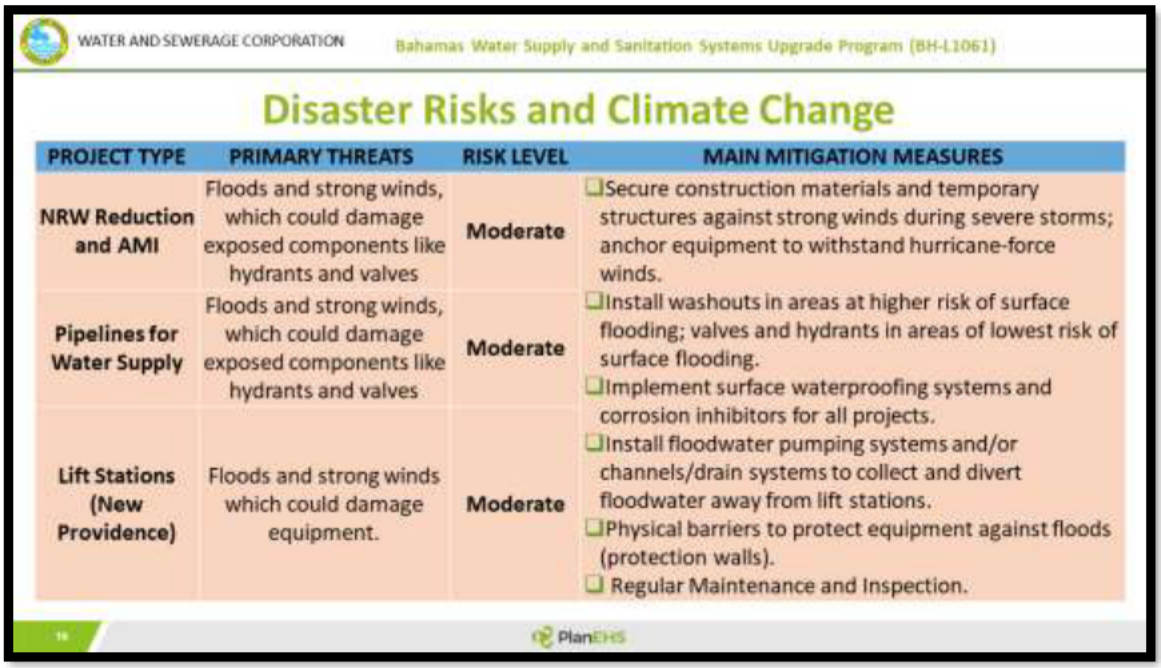

WATER AND SEWERAGE CORPORATION Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)

Disaster Risks and Climate Change

PROJECT TYPE	PRIMARY THREATS	RISK LEVEL	MAIN MITIGATION MEASURES
NRW Reduction and AMI	Floods and strong winds, which could damage exposed components like hydrants and valves	**Moderate**	❑Secure construction materials and temporary structures against strong winds during severe storms; anchor equipment to withstand hurricane-force winds.
Pipelines for Water Supply	Floods and strong winds, which could damage exposed components like hydrants and valves	**Moderate**	❑Install washouts in areas at higher risk of surface flooding; valves and hydrants in areas of lowest risk of surface flooding. ❑Implement surface waterproofing systems and corrosion inhibitors for all projects.
Lift Stations (New Providence)	Floods and strong winds which could damage equipment.	**Moderate**	❑Install floodwater pumping systems and/or channels/drain systems to collect and divert floodwater away from lift stations. ❑Physical barriers to protect equipment against floods (protection walls). ❑ Regular Maintenance and Inspection.

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WATER AND SEWERAGE CORPORATION Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)

N	Construction ESPM Programs	NRW	AMI	Water Supply	Lift Stations
1	**Monitoring and Control of Compliance with Mitigation Measures** (required resources, designated responsible personnel, compliance indicators, and monitoring goals).	X	X	X	X
2	**Construction Sites Management** (designated storage areas, waste management systems, water supply, safety signage, first aid kits, etc).	X		X	X
3	**Air Quality, Noise and Vibrations Management** (maintaining equipment, scheduling noisy activities, covering transported materials, managing drop heights, etc.)	X		X	X
4	**Erosion Control** (confining activities and vehicle movements to designated zones, managing runoff and soil displacement to maintain natural flow patterns, inspections of sediment controls).	X		X	
5	**Flora and Fauna Management** (minimizing natural vegetation loss, implementing a revegetation scheme, deterring wildlife from construction zones, strictly prohibiting hunting and the introduction of invasive species, etc.	X		X	X
6	**Aquatic Habitat Management** (covering exposed slopes, demarcating work areas, prohibiting creosote-treated pilings, avoiding shoreline modifications, and restricting sand extraction to authorized areas etc).	X		X	X

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WATER AND SEWERAGE CORPORATION Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)

N	Construction ESPM Programs	NRW	AMI	Water Supply	Lift Stations
7	**Waste Management** (segregation, storage, and disposal of waste generated, adhering to legal and environmental standards).	X	X	X	X
8	**Effluent Management** (maintaining natural flow patterns in drainage and soil movements, impermeable flooring, dry toilets or portable sanitation facilities, avoiding on-site washing of tools and machinery, properly storing and removing effluents).	X		X	X
9	**Chemical Substances Management** (safe refueling procedures with tanker trucks, spill containment, storage guidelines, proper labeling, data sheets, emergency procedures, PPE use, etc).	X		X	
10	**Occupational and Community Health and Safety** (train personnel, provide PPE, assess risks, implement safety protocols, emphasis on communication, monitoring, and compliance with safety guidelines).	X	X	X	X
11	**Traffic and Pedestrian Management** (identifying sensitive locations as schools, assessing road conditions and traffic congestion, providing traffic marshals at key hotspots, ensuring vehicles meet emission standards, etc.)	X		X	X
12	**Pest and Vector Control** (pest disinfection before soil movement, prevent illegal waste disposal, etc).	X		X	X

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WATER AND SEWERAGE CORPORATION Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)

N	Construction ESPM Programs	NRW	AMI	Water Supply	Lift Stations
13	**Socio-Environmental Training for Site Personnel** (code of conduct, training in basic environmental protection, risk management, emergency response, prevention of gender-based violence, etc.)	X	X	X	X
14	**Disaster Management and Emergency Response** (contingency prevention and control strategies through safety practices, report hazards, maintain equipment, and follow emergency protocols).	X		X	X
15	**Community Information and Participation** (Community Information and Participation Program implementation).	X	X	X	X
16	**Coordination with Service Providers** (ensuring minimal disruption and effective project execution).	X		X	
17	**Environmental Liabilities Program** (preliminary assessment and classification of liabilities, laboratory analysis of detected special wastes, removing or remediating identified liabilities.	X		X	
18	**Chance Find Procedure** (monitoring for archaeological finds, halting work if discovered, securing sites, consulting authorities, conducting salvage operations, and reporting to ensure preservation and compliance.)	X		X	
19	**Works Closure** (ensuring dismantled sites are restored and integrated into the environment.)	X		X	X

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WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
Operational ESMP
N
Operational Strategic ESPM Programs
NRW
AMI
Water Supply
Lift Stations
1
Waste Management Program (segregation, storage, and disposal of waste generated, adhering to legal and environmental standards).
X
X
X
X
2
Occupational Health and Safety Program (train personnel, provide PPE, assess risks, implement safety protocols, emphasis on communication, monitoring, and compliance with safety guidelines).
X
X
X
X
3
Grievance Redress Mechanism (receiving, analyzing, and resolving public complaints, ensuring accessibility, transparency, and confidentiality.)
X
N/A
X
X
4
Capacity Building Program for WSC Personnel (training on SCADA Systems and AMI, as well as data management and reporting).
X
X
X
X
5
Contingency Plan (emergency response structure, roles, resources, procedures to follow in case of an emergency.)
X
N/A
X
X
6
Socio-Environmental Training Program (waste management, contingency plans, PPE, fire safety protocols, and environmental regulations, etc.)
X
X
X
X
7
Road Safety and Traffic Management Program (sensitive locations identification, road safety requirements implementation, etc.)
X
N/A
X
X
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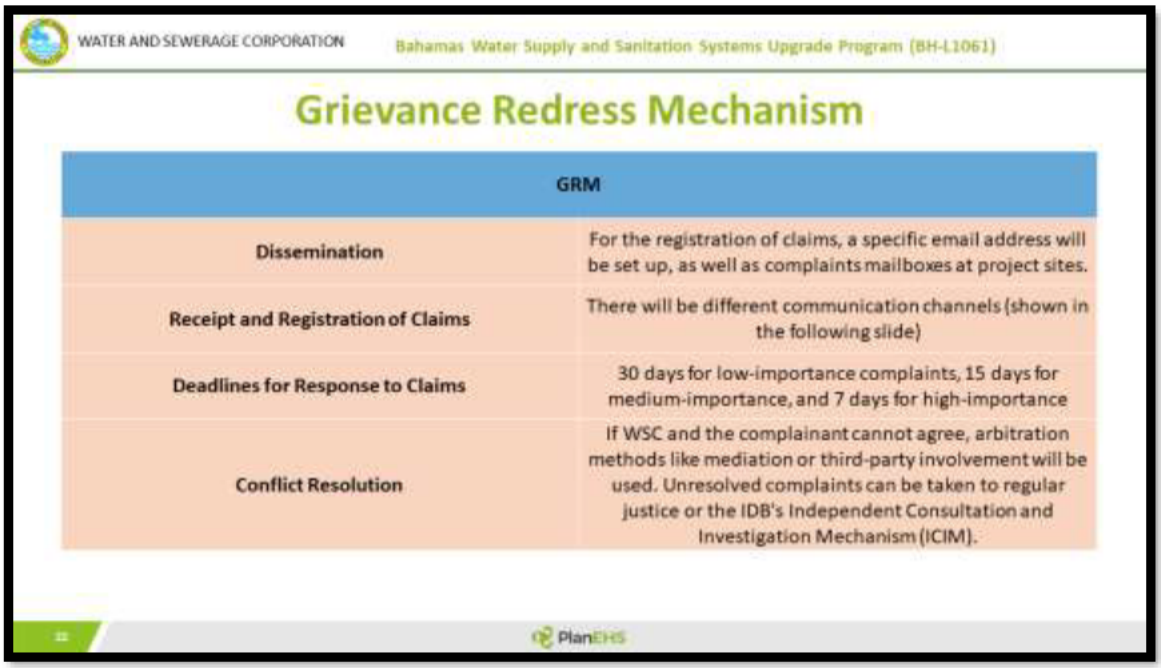
WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
Grievance Redress Mechanism
GRM
Dissemination
For the registration of claims, a specific email address will be set up, as well as complaints mailboxes at project sites.
Receipt and Registration of Claims
There will be different communication channels (shown in the following slide)
Deadlines for Response to Claims
30 days for low-importance complaints, 15 days for medium-importance, and 7 days for high-importance
Conflict Resolution
If WSC and the complainant cannot agree, arbitration methods like mediation or third-party involvement will be used. Unresolved complaints can be taken to regular justice or the IDB's Independent Consultation and Investigation Mechanism (ICIM).
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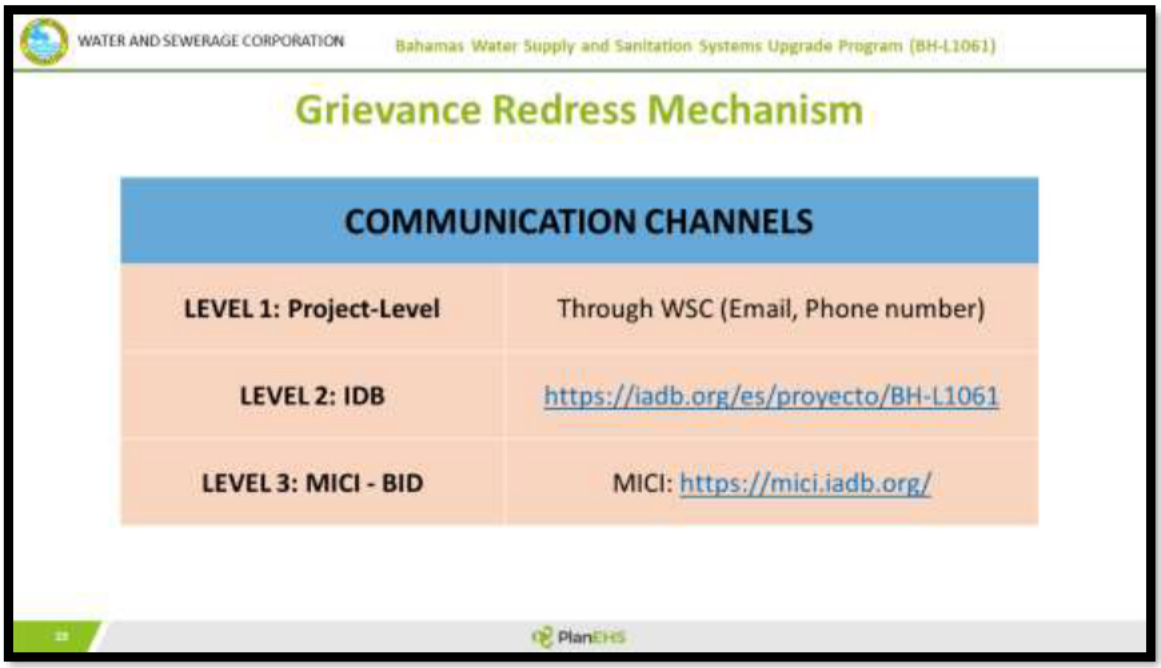
WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
Grievance Redress Mechanism
COMMUNICATION CHANNELS
LEVEL 1: Project-Level
Through WSC (Email, Phone number)
LEVEL 2: IDB
https://iadb.org/es/proyecto/BH-L1061
LEVEL 3: MICI - BID
MICI: https://mici.iadb.org/
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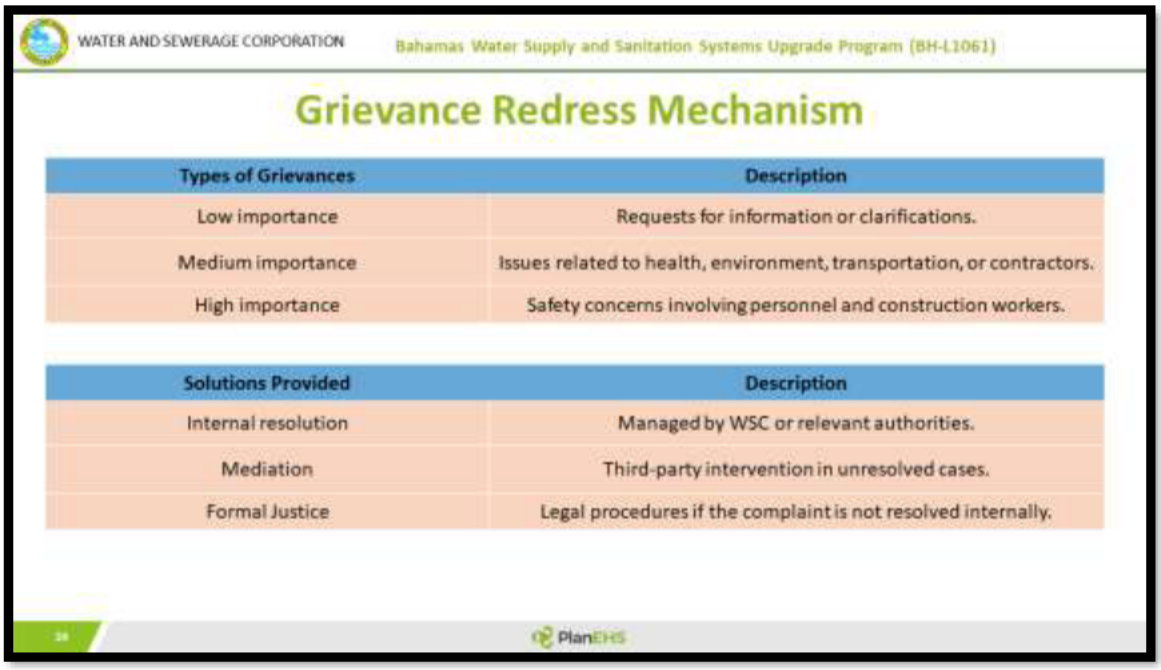
WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
Grievance Redress Mechanism
Types of Grievances
Description
Low importance
Requests for information or clarifications.
Medium importance
Issues related to health, environment, transportation, or contractors.
High importance
Safety concerns involving personnel and construction workers.
Solutions Provided
Description
Internal resolution
Managed by WSC or relevant authorities.
Mediation
Third-party intervention in unresolved cases.
Formal Justice
Legal procedures if the complaint is not resolved internally.
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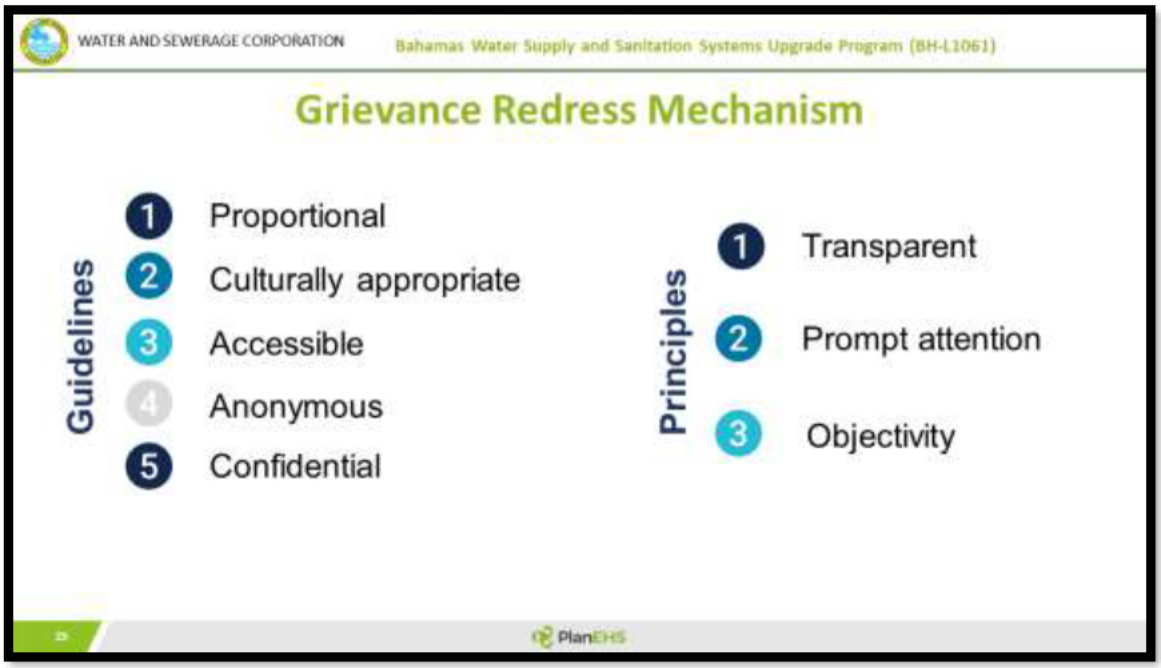
WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
Grievance Redress Mechanism
Guidelines
1 Proportional
2 Culturally appropriate
3 Accessible
4 Anonymous
5 Confidential
Principles
1 Transparent
2 Prompt attention
3 Objectivity
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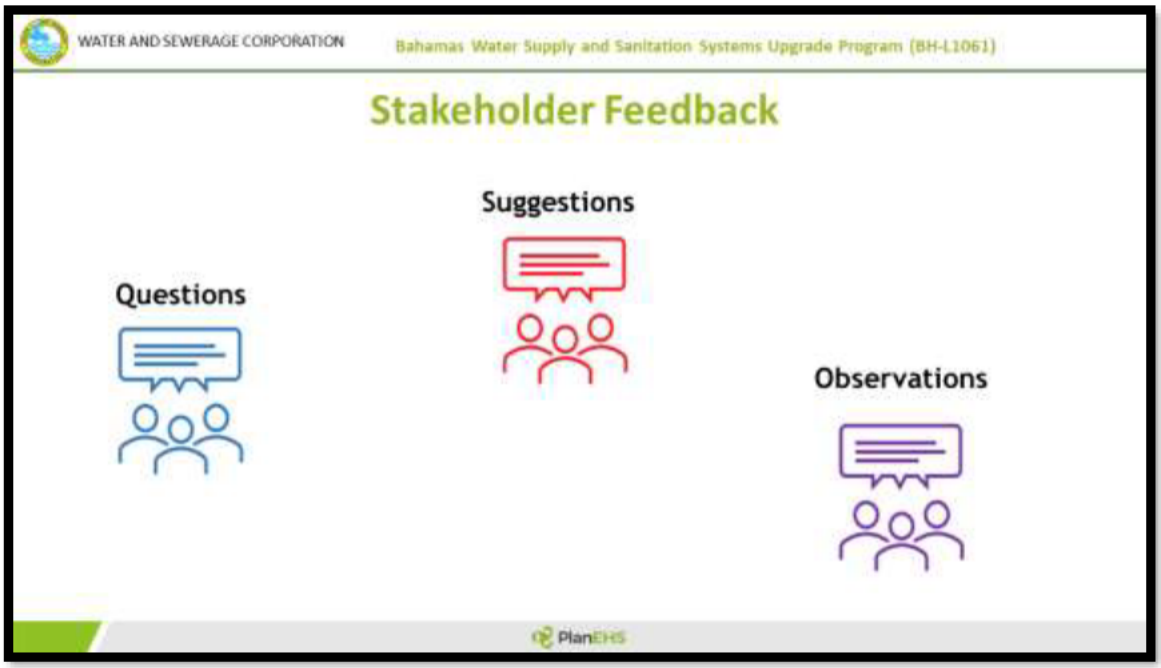
WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
Stakeholder Feedback
Suggestions
Questions
Observations
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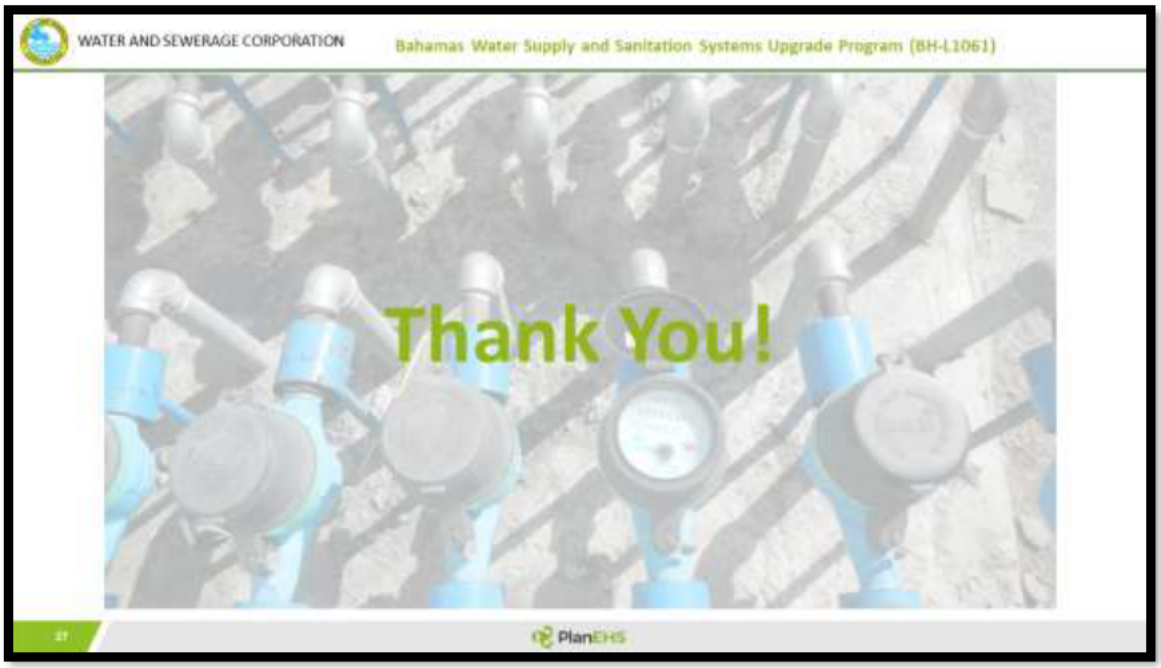
WATER AND SEWERAGE CORPORATION
Bahamas Water Supply and Sanitation Systems Upgrade Program (BH-L1061)
Thank You!
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