



"RE-BUILDING THE CITY'S WATER SYSTEMS FOR THE 21ST CENTURY"

Sewerage & Water Board OF NEW ORLEANS

625 ST. JOSEPH STREET
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August 13, 2018

The Audit Committee met on Wednesday, August 8, 2018 in the Board Room, 625 St. Joseph Street, New Orleans, LA. The meeting convened at 11:30 A.M.

PRESENT:

Director Dr. Tamika Duplessis, Chairman
Director Robin Barnes
Director Lynes Sloss
Director Lewis Stirling

ABSENT:

None

OTHER BOARD MEMBERS PRESENT:

ALSO IN ATTENDANCE:

Jade Brown-Russell
Yvette Downs, CFO
James Thompson, Office of Special Counsel
Raymond Gable, Internal Audit
Ramsey Green, Mayor's Office
Mary E. Arceneaux, Legal
Bruce Adams, Interim General Superintendent
Ron Spooner, Chief of Engineering

ACTION ITEMS:

Director Dr. Tamika Duplessis began the meeting by bringing attention to the first of two Action Items called listed. The first, the Discussion and Consideration of proposed Audit Committee and Internal Audit Charters was deferred to next committee meeting. Next, Resolution (R-122-2018) Independent Financial auditing Service Contract Change Order, in which, board members posed several questions in efforts of understanding the members' role in approving department change orders. Also called to discussion was two resolutions moved from Finance Committee Agenda to Audit Committee Agenda. Resolutions 102-2018 and 114-2018 were discussed and approved. The motion to approve R-102-2018

was moved by Director Lewis Stirling and seconded by Director Lynes Sloss. A motion to amend the Audit agenda to add R-114 Field Change Order was moved by Director Lynes Sloss and seconded by Director Lewis Stirling.

PRESENTATION ITEMS:

3.) Yvette Downs, CFO, rendered a verbal update to the CAFR progress; she is expecting the finalization of the report within the next couple of weeks.

4.) Raymond Gable, Audit Manager, gave a presentation of the Preliminary 2018 Internal Audit Work Plan. He explained the Internal Audit department is working on the current RFP and a couple of ongoing reports. In addition, he mentioned the preparation of the 2019 Audit Plan.

5.) James Thompson and Mary Arceneaux gave an update of the all external audits. Arceneaux added, all requested documentation has been submitted to OIG/ Cotton & Company LLP.

6.) Lastly, Priya Sarkar presented information about incorporating an Enterprise Risk Management system.

INFORMATION ITEMS:

7. Proposed Audit Committee Charter

ADJOURNMENT:

There being no further business to come before the Audit Committee, the meeting adjourned at approximately 12:45 P.M.

Respectfully submitted,

Dr. Tamika Duplessis, Audit Committee Chair

APPROVAL OF THE UPDATE TO THE SEWERAGE AND WATER BOARD HAZARD MITIGATION PLAN

WHEREAS, The New Orleans Sewerage and Water Board staff has engaged in extensive studies of the natural hazards facing its properties; and

WHEREAS, The New Orleans Sewerage and Water Board has updated the New Orleans Sewerage and Water Board Hazard Mitigation Plan; and

WHEREAS, the goals of this plan are to reduce the loss of life, decrease repetitive property losses due to natural disaster, and provide leadership and coordination to encourage all departments and sections under the auspices of The New Orleans Sewerage and Water Board to undertake hazard mitigation planning activities, which will minimize potential losses resulting from natural disasters; and

WHEREAS, the strategies of this plan are to identify and characterize hazards, asses risks, prioritize and implement mitigation measures; and

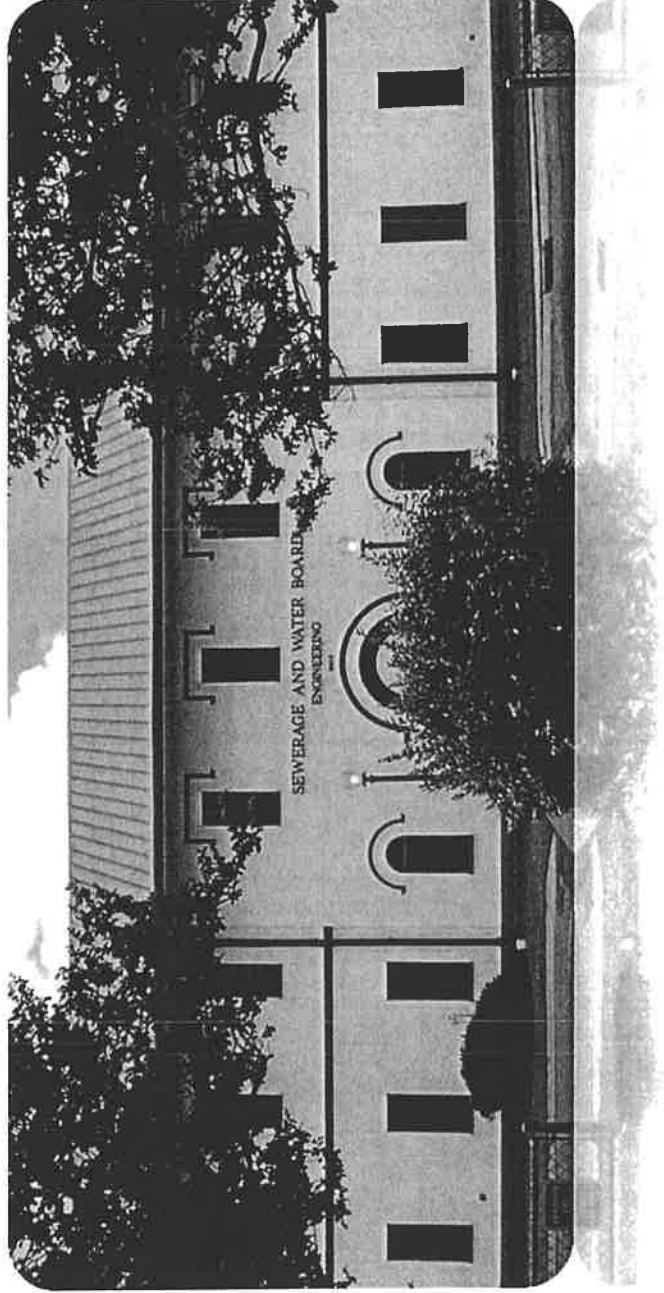
WHEREAS, the adoption of the Updated New Orleans Sewerage and Water Board Hazard Mitigation Plan would be in the best interest and protection of those located at New Orleans Sewerage and Water Board properties

NOW, THEREFORE, BE IT, RESOLVED, BY THE NEW ORLEANS SEWERAGE AND WATER BOARD THAT THE DOCUMENT ENTITLED THE NEW ORLEANS SEWERAGE AND WATER BOARD HAZARD MITIGATION PLAN AND ALL OFFICIAL MAPS PERTAINING THERETO, ARE HEREBY ADOPTED THIS, THE 17 DAY OF OCTOBER 2019.

I, Ghassan Korban, P.E., Executive Director,
Sewerage and Water Board of New Orleans, do herby certify
that the above and foregoing is a true
and correct copy of Resolution adopted at the Regular
Monthly Meeting of said Board, duly called and held,
according to law, On October 17, 2018

**GHASSAN KORBAN, P.E. EXECUTIVE DIRECTOR
SEWERAGE AND WATER BOARD OF NEW ORLEANS**

Sewerage & Water Board of New Orleans



Hazard Mitigation Plan Update

9/18/18

Incidents Since 2012

Probability	Impact	Hazard	Date	Incidents	Impact to S&WB	Mitigation Measures	Mitigation Status
Medium	High	Hazardous Materials/River Allision	2/2/2016	River Allision	Damage to Old and New River Stations Wharf	Barges placed at River Stations	Completed
Medium	Low	Tornado	2/23/2016	Tornado	Loss of Power at 17 Sewer Stations	Install Marine Beacons	In Design
Low	High	System Failure	12/11/2016	A/C outage at St. Joseph	IT Server Failure	Purchase Generators/Pumps for 67 Sewer Stations	In Design
High	High	Hurricane	6/21/2017	Ts-Cindy	Staffing and Response Cost	Construct Alt Server at Main Water Plant	In Design
High	High	Flood	7/24/2017	Flood (5" of Rain One Hour)	Pumping Station Capacity and Power interruptions	Construction of Resilience Center and Safe House	In Design
High	High	Flood	8/5/2017	Flood (9" of Rain One Hour)	Pumping Station Capacity and Power interruptions	Purchase and Install 5 Electric Motor Devices at Main Water Plant	Completed
Low	High	System Failure	8/9/2017	System Failure	S&WB Power Plant Failure	Purchase and Install 5 Electric Motor Devices at Main Water Plant	Completed
High	High	Hurricane	10/11/2017	TS Nate	Staffing and Response Cost	Construction of Resilience Center and Safe House	In Design
Low	Low	Severe Heat / Severe Cold / Winter Storm	12/16/2017	Winter Storm INGA	Infrastructure Piping Breaks, East and West Bank Boil Water	Construction of Backup Filter at Main Water Plant	Construction

S&WB Mitigation Summary

- 73 out of 73 Board wide projects completed since last Hazard Mitigation Plan (HMP) 2012
- 32 Board Wide projects added to HMP Plan since 2012 update
- Total of Estimated Amounts for projects is \$1.4 Billion

SPS Hazard Mitigation Grant Program

Sewer Pumping Station	Mitigation	Completed	Construction Cost
Bullard	Station Raised	6/8/16	\$1,556,269
SPS 8	Station Raised	9/9/18	\$5,330,073
DODT	Station Raised	4/18/17	\$1,366,173
Lake Forest	Station Raised	5/9/16	\$1,494,420
Plum Orchard	Station Raised	4/6/17	\$1,119,658
Victoria	Station Raised	6/10/15	\$1,312,049
SPS 6	Station Raised	12/29/16	\$3,592,816
Lawrence	Station Raised	6/2/16	\$1,536,250
Burke	Station Raised	9/28/15	\$1,566,416
Total			\$18.8 M

New East Bank Wastewater Treatment Plant Backup Generator

- Scope of Work:
 - The installation of the new backup generator at the East Bank Wastewater Treatment Plant. This generator will provide electrical power to the East Bank Sewer Treatment Plant in the event of a power outage from the local power utility provider.
 - Amount \$12.3 Million

UPGRADE BERM OF THE EAST BANK WASTE WATER TREATMENT PLANT

- **Scope of Work:**
 - Work consisted of modification of existing flood protection system consisting of earthen berm and concrete flood wall by installing a concrete T-wall, metal floodgates and relocation of all utilities and associated work. Including; removal of fence, excavation, installation of a perimeter access road, stairs, drainage, road re-pavement, piling and other associated work. The plant was flooded by approximately 16 feet of water during Hurricane Katrina, and the new flood wall has raise the flood protection elevation to approximately 18 feet.
 - Amount \$33.4 million

New 15MW Generator at Main Water Plant

- Scope of Work
 - The USACE is ^{CV1} installing a 15MW generator to operate the Carrollton Water Plant in the event of a power failure.
 - Completion Date: March 2013
 - Amount \$31.2 Million

Slide 7

CV1 spell out
CURRID, Veronica, 3/19/2018

Southeast Louisiana Urban Flood Control Project

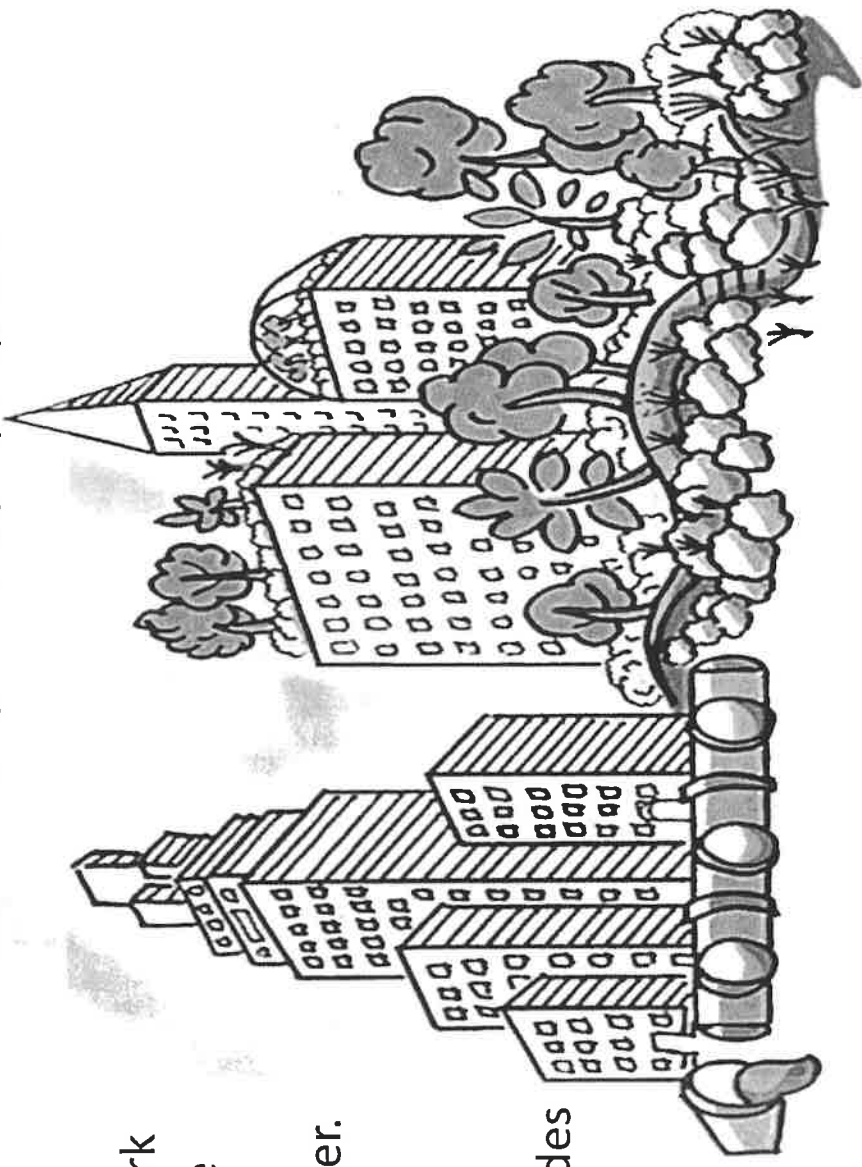
- In Orleans Parish, plans involve improving 16 major drainage canals, adding pumping capacity to two pump stations and the construction of two new pump stations.
- Of the 20 funded SELA projects in Orleans Parish, 16 projects are complete and four projects are under construction.

Underpass Pumping Station Mitigation

Underpass Pumping Station	Mitigation	Completed	Construction Cost
Canal Blvd	Backup Generator	3/23/18	\$277,224.57
Franklin	Backup Generator	3/23/18	\$288,844.49
New Carrollton	Backup Generator	3/23/18	\$246,370.68
Paris Ave	Backup Generator	3/23/18	\$250,690.88
Press Drive	Backup Generator	3/23/18	\$344,363.28
Hospital (City Park)	Backup Generator	11/2018	\$323,000.00
St. Bernard	Backup Generator	11/2018	\$323,000.00

Green Infrastructure & Flood Mitigation

- Stormwater runoff carries trash, bacteria, heavy metals, and other pollutants from the urban landscape to our lake.
- Heavy rains cause erosion and flooding, damaging habitat, property, and infrastructure.
- At the city scale, a patchwork of natural areas can provide habitat, flood protection, cleaner air, and cleaner water.
- A cost-effective, resilient approach to managing wet weather impacts that Provides environmental, social, and economic benefits.



Completed SWB Green Infrastructure Projects

- **Carrolton - Hollygrove Greenline: Monroe St & Forshey St (2017)**
 - **The WEB, Water Effectiveness in Broadmoor: 3601 General Taylor (2017)**
 - **Central City Project: 2433 S. Galvez St, (2017)**
 - **Aurora Rain Gardens: Carlisle Ct & Westchester St. (2016)**
 - **Lower 9th Ward Earth Lab: 1901 Caffin Ave (2017)**
 - **Florida Ave Corridor Learning Trail: 6501 Florida Ave (2018)**
 - **SWB Downtown green Roof: 625 St Joseph St. (2018)**
 - **Rabouin International High School Green Infrastructure Lab (2017)**
- 727 Carondelet, New Orleans, LA, 70113

Water Hammer

- Scope of Work
 - The Water Hammer Project consists of upgrades to the water distribution facilities to reduce the occurrence of a "water hammer" effect. The water hammer effect is the abrupt, transient surges in water pressure caused by pump shut-downs due to loss of power or power surges. The force of the water hammer effect causes pipe joints to leak, and water mains and connections to break.
 - Amount \$90 Million
 - Estimated Completion: 2023

Electronic Motor Devices

- Scope of Work
 - On August 9, 2017 the S&WB Main Power House lost all 25 cycle power generation capabilities. In response to this incident, five Electronic Motor Devices (EMD) were installed at the S&WB Main Water Plant. These devices will provide the required 25 cycle backup power to the S&WB drainage stations, to ensure operability in emergency situations.
 - Amount \$22 million
 - Completion: Spring 2018

Sewer Pumping Stations

- Scope of Work
 - This project will install generators and transfer switches at 64 Sewer Pumping Stations. This mitigation project once completed will provide continuous power to 64 sewer pumping station in the event local utility power becomes interrupted due to a power failure
 - Estimated Amount \$25,000,000
 - Estimated Completion: TBD

Safe House and Resiliency Center

- **Scope of Work**
 - Safe House and Resiliency Center will provide alternate work location for back-office areas in the event their permanent workplace becomes unavailable. The center will also house the Board's emergency operations center, safe house, and emergency food distribution center for the Boards essential employees during emergency incidents. The center will also be the site of the Boards computer center server.
 - Estimated Amount \$21 Million
 - Estimated completion date: TBD

External Audit		Start Date	Status Update
Fed OIG	Federal OIG	1/5/2018	OIG is reviewing documentation provided. A draft report is scheduled to be completed in September.
City of New Orleans OIG	Billing & Collection	4/11/2018	OIG has not requested any information from Customer Service. OIG had a meeting with S&WB on 8.23.18 and requested additional information regarding the billing resolution process. S&WB documentation to OIG on 09/26/18.
	Contractor Oversight	4/11/2018	An entrance letter was sent to SWB with the date of 04/11/18.
	Inventory	4/11/2018	Procurement sent info 5/22/18, 6/6/18, 6/13/18
	Internal Audit	4/11/2018	Staff interviewed 6/11/18, 7/9/18
	Procurement	4/11/2018	Procurement sent info 5/22/18, 6/6/18, 6/13/18
	Safety	4/11/2018	
	General	4/11/2018	A number of documents have been requested and are being gathered
P & N	CAFR	4/1/2018	SWB received an extension from the State on 6/29/18. The deadline is now 9/28/18. SWB is hiring an outside CPA firm to assist with the CAFR. There is a meeting set for 8.24.18 at the board to discuss the progress made by the board. S&WB requested an additional extension. LLA will meet on 10/5/18 to approve the additional extension.
	Louisiana Legislative Auditor Advisory Services	9/27/2017	SWB received a draft report on 5/1/18
	Louisiana Legislative Auditor contract audit per House Resolution 92	6/14/2018	Members of management were interviewed on 6/14/18. The board received an email from the LLA on 7/11/18 requested information on the Cogsdale contract. S&WB sent the information requested on 7/11/18. S&WB received an email from Ms. Stauffer on 7.24.18 requesting information regarding missing contracts. Members of the Internal audit team tracked down the missing information Ms. Stauffer requested. The Internal Audit team found that many of the contracts were already sent or being sent to LLA.