APPLYING RISK TO PRIORITIZE CAPITAL PLANNING

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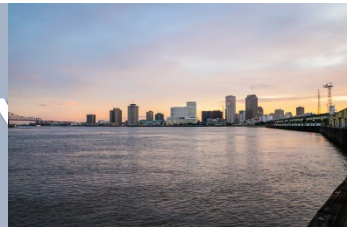
AMWA Executive Conference

NEW ORLEANS A HIGHLY PROTECTED CIT



HISTORIC CITY ON THE MISSISSIPPI DELTA

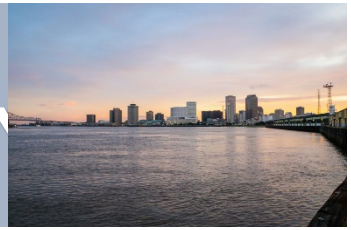
Greater New Orleans has a three hundred year history of adapting to life surrounded by water.

Located at the confluence of the Mississippi and the Gulf of Mexico, Greater New Orleans has always been the “Gateway to the Americas.” Constant flows of people and commerce have shaped the region’s remarkable cultures.

The urban design, infrastructure, buildings, governance, food, and music of the region all speak to this proud history.

Our industry, foods, culture, drinking water, and almost every other facet of life in the Greater New Orleans Region depends on maintaining a relationship with water that harnesses its value while guarding from its peril.

NEW ORLEANS A HIGHLY PROTECTED CITY



- Hurricane Katrina changed New Orleans substantially
- The event produced substantial loss of life and property damage
- The event provided an opportunity for the City to lead the world in recovery, risk and resilience to future events
- New Orleans has become an incubator of resilience globally. As such New Orleans is a highly protected City

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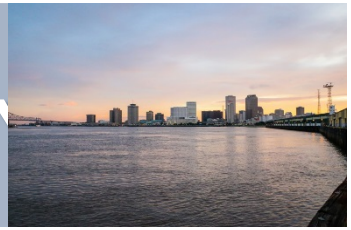
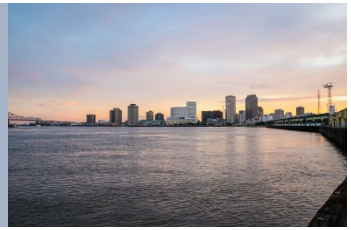


- Over $14 billion has been invested to enhance or expand levees, floodwalls and pumping stations
- These flood protection investments mean there have been significant savings from avoided losses to physical assets across Orleans Parish
- Current flood protection in place in Orleans Parish is saving $650-700 million of property damage per year from storm surge on an annualized basis
- Even with this investment, annual expected loss from hurricane storm surge is estimated at $175-275 million of property damage

THE VALUE OF THE SWB TO THE PRODUCTIVITY AND RESILIENCE OF ORLEANS PARISH



- It is estimated that tourism in Orleans Parish generates an average of $250 million per year of direct tax revenue (Single largest industry)
- Orleans Parish lost $325 million in tax and other revenues between 2005 and 2006 due to lasting effects of Hurricane Katrina
- SWB sustained $117 million in damage during the storm
- From a different perspective, for every $100 of property damage, Orleans Parish lost 61 cents in tax revenue
- In the 130 days after Hurricane Katrina, the City lost on average $25.3 million per day in GDP
- It is estimated that one month of hurricane-related downtime would reduce the City's economic output by roughly the same amount (Based on estimated Orleans Parish annual GDP of $23.5 billion)

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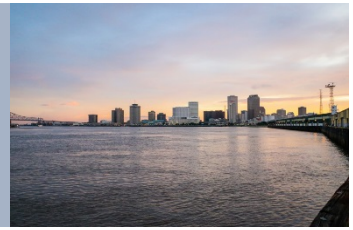
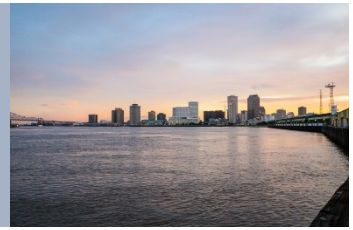


The physical damage to SWB assets does not represent the full extent of economic loss. Business interruption to SWB revenue streams are considerable.

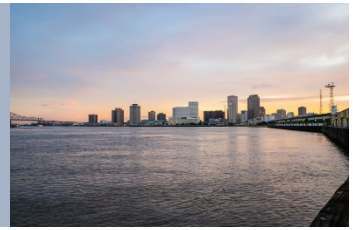
- In 2005 SWB was anticipated to collect $172 million in revenue. The impacts of Hurricane Katrina lasted the remaining 130 days of 2005 resulting in sizeable drops in revenue
- The indexed revenue losses for SWB are $51 million, $13 million and $11 million for Hurricanes Katrina, Gustav and Isaac respectively
- For Hurricane Katrina, this equated to a revenue loss of approximately $380,000 per day

ASSESSMENT OF THE SWB ASSET PORTFOLIO



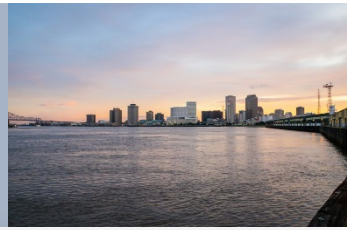
- As part of the City Resilience Strategy developed in conjunction with the Rockefeller 100 Resilient Cities initiative Veolia and Swiss Re teamed to offer a first of its kind analysis of risk mitigation through capital investment
- The team working with SWB staff conducted an analysis of 203 SWB assets. Sixty-five of the assets are considered critical
- The replacement value of the buildings and contents is $3.4 billion
- A sensitivity analysis of existing flood protections was conducted
- The impacts of future climate risks were assessed

PRELIMINARY MODELING RESULTS FROM THE TEAM ON RESILIENCE



- The critical physical assets of SWB were reviewed for their exposure to wind and storm surge-driven flood. Over 150,000 hurricanes were modelled
- The results show that SWB loses $6 million per year on an annualized basis
- The SWB is resilient to storm surge risk up to a 100-year event (1% of probability in any given year)
- However, the 80% of losses are driven by storm surge in extreme events
- The largest loss drivers are isolated within a specific area – East Bank Drainage Pumping Stations

RESILIENCE MEASURE ANALYSIS TO PROTECT SWB ASSETS



Operational Improvements

- Improve energy reliability measures
- Create a recruitment strategy to reduce impact of skilled human resources shortage
- Improve protection of assets against fire hazards
- Develop an IT Dashboard of the SWB network to improve visibility of operations

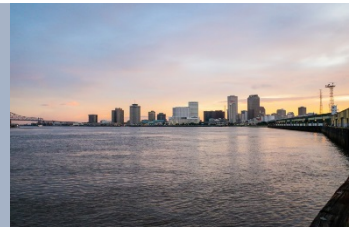
Surge hardening measures

- Elevations of drainage pumping stations and 2 sewer pumping stations
- Elevations of transformers and generators
- Reinforce roof structures and add new generators to station

Examine more efficient and comprehensive insurance coverages

- New insurance solutions and increasing policy limits
- Eliminate coverage gaps
- Increase the speed in which insurance proceeds are received to facilitate SWB liquidity and rapid response

PROJECT NEXT STEPS



- Calculate baseline exposure of physical assets – complete
- Calculate 2050 climate exposure of current assets – in progress
- Evaluate resilience improvements to the various systems – in progress
- Model the impact of selected resilience improvements on current and future climate scenarios to determine potential cost savings
- Develop resilience plan to maximize investment funds for risk reduction and save taxpayers money
- Implementation of resilience plan

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