



Update on Infrastructure Projects & Drainage Analysis

City of New Orleans

September 13, 2019

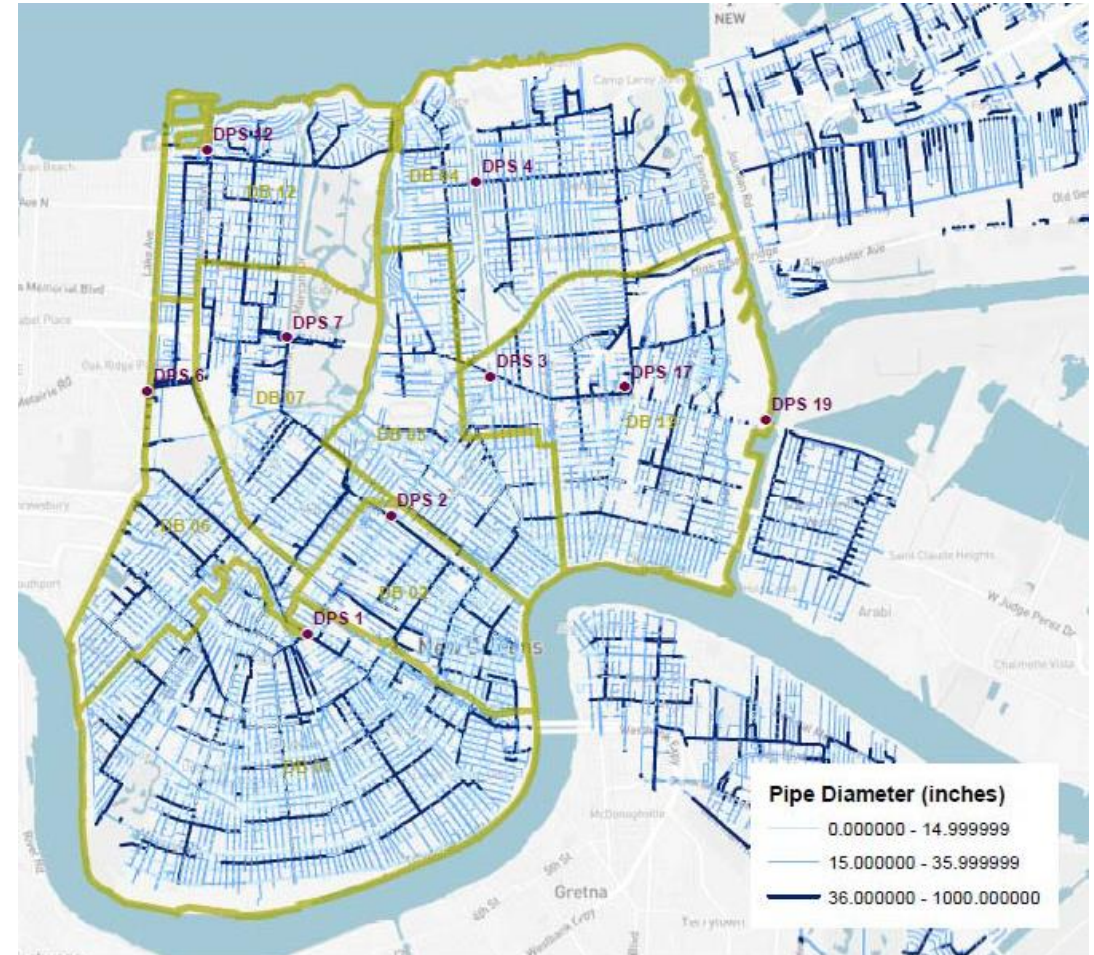
Moody's Upgrades City of New Orleans GO to A2

*The upgrade to A2 reflects the city's consistent trend of economic growth which has led to increased revenues and an improved financial position. The upgrade further incorporates the city's large and growing tax base and economy which benefits from the presence of several institutions of higher education and a thriving tourism industry. Investments of over **\$14B** by the federal and state governments along with the city have boosted the city's resilience to environmental risks, as well as continued strategic planning for further capital improvements to mitigate the impact of environmental events. These initiatives on top of the city's improved financial profile positions the city as better prepared to manage future challenges associated with its significant exposure to environmental risks.*

Infrastructure Challenges

DPW Drainage System

- More than 72,000 catch basins
- More than 1,500 miles of pipes under 36" in diameter carry water from catch basins to SWBNO system
- More than 48,000 drainage manholes allow access for inspection and maintenance of drain lines and connections



City, Sewerage and Water Board Provide Statement on Observed Flooding – May 12, 2019



City of New Orleans
Mayor LaToya Cantrell

FOR IMMEDIATE RELEASE

May 12, 2019

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City, Sewerage and Water Board Provide Statement on Observed Flooding

NEW ORLEANS — Today, the City of New Orleans and the Sewerage and Water Board of New Orleans released the following statement on observed flooding during morning storms:

More than five inches of rain fell in parts of the city between 11 p.m. and 6 a.m., with bouts of heavy rain at rates of two inches an hour and higher sparking Flash Flood Warnings. Widespread street flooding was reported throughout the city, most of which cleared within two hours. While today's event showed some improvements in the drainage system, observed flooding in some areas took notably longer to drain. Those areas include:

- Area bounded by Canal Boulevard, West End Boulevard, City Park Avenue, and Filmore Avenue
- Broad Street and Orleans Avenue corridors
- Banks Street corridor
- Franklin Avenue at I-610/I-10 overpass
- Napoleon Avenue from Claiborne Avenue to Broad Street
- St. Bernard Avenue corridor
- St. Claude Avenue from Elysian Fields Avenue to the Lower 9th Ward
- General De Gaulle and Wall Boulevards corridor

As we work to continuously improve stormwater management infrastructure, the City and the Sewerage and Water Board will analyze today's rain event and its impact. Using pump station and rain gauge data, drainage surveys, and video analysis, we will work to determine rainwater volume versus drainage capacity and to identify potential opportunities for drainage improvements.

"My administration has been laser-focused on infrastructure as a whole and stormwater management in particular," said **Mayor LaToya Cantrell**. "As we face our issues head on, we are using data and experience to better live with water."

Residents are encouraged to report clogged catch basins and areas of poor drainage to 3-1-1.

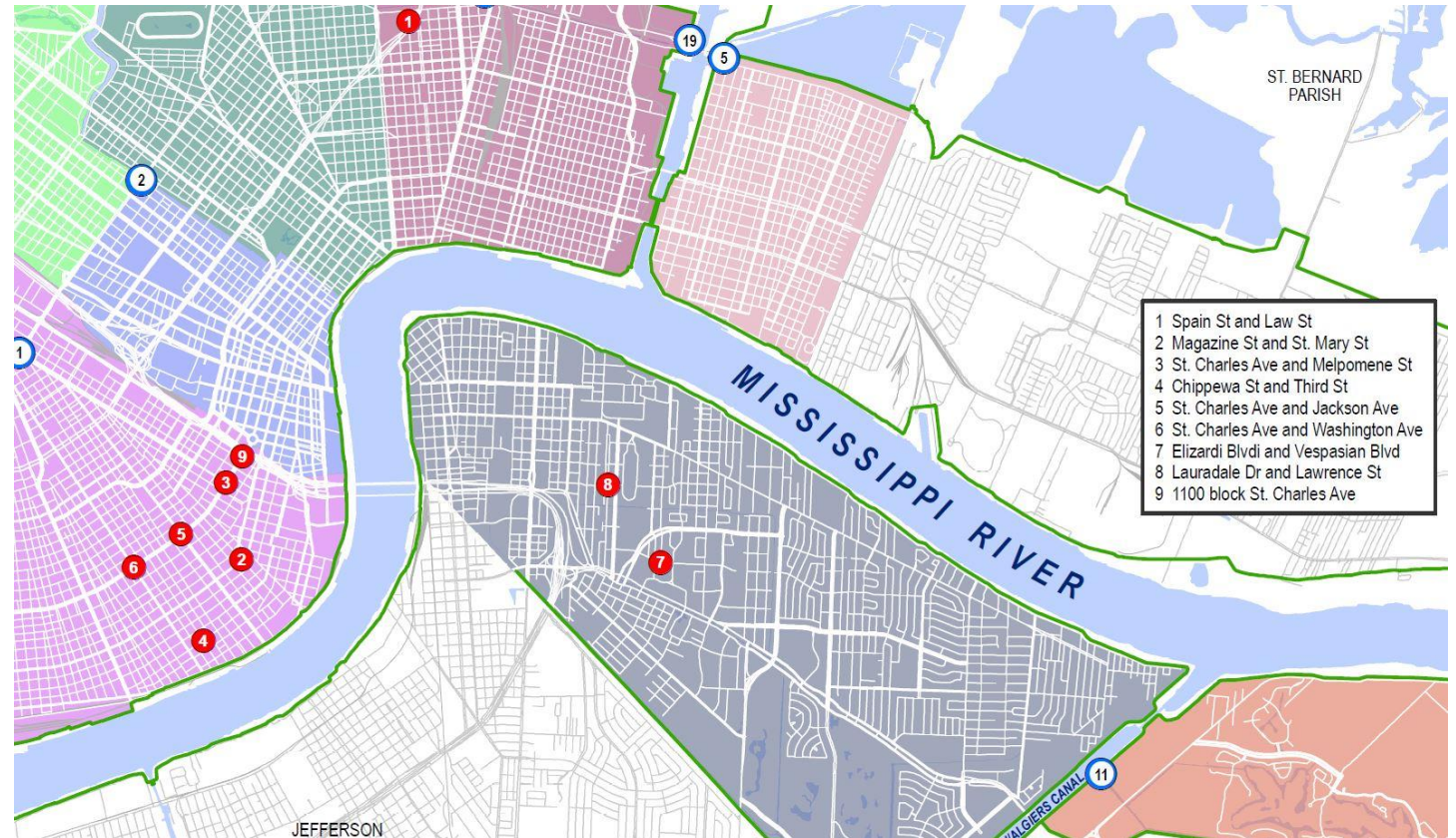
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Drainage Analysis

Under way at 9 Additional Lingered Flood Locations Identified on August 26th

- Lauradale and Lawrence
- 1100 St. Charles
- Elizardi and Vespasian
- Spain and Law
- Magazine and St. Mary
- St. Charles and Melpomene
- Chippewa and Third
- St. Charles and Jackson
- St. Charles and Washington



Drainage Analysis

Currently Under way

- CCTV, cleaning of catch basins and mainlines, identifying broken pipes throughout city.
- Using the city wide existing drainage model to examine both the effects and possible solutions to flooding.
- Looking at the impacts of current 10” drain lines throughout neighborhoods where flooding has occurred and determining the appropriate line sizes to accommodate present day impervious areas.
- Exploring opportunities for rainwater detention storage in neutral grounds and low lying areas during rain events.
- Studying our City’s groundwater and soils and to understand how our water management systems impact the sinking, or subsidence, of our soils.

Joint SWBNO / DPW Infrastructure (JIRR) Program

Infrastructure Accomplishments

Then – May 2018

JIRR Program stalled, less than 1% of Funds Spent

Now – As of August 30, 2019

JIRR Program spending accelerated, approximately 5% (\$75M) of City's \$1.4B Obligation Reimbursed

- Completed 9 road projects worth **\$25M**
- 12 road projects under construction worth **\$80M**
- Kicking off construction on 6 road projects worth **\$40M** in next 90 days
- Another 14 projects will be advertised in the next 30 days work approximately **\$90M**.

Where possible, adding permeable pavement to parking lanes on Waves 3 and 4



Roadwork Nola
@roadworknola

Follow

Crews continue to make headway in the full road reconstruction project in the 800 and 900 blocks of Taft Place. For the latest construction update visit

roadwork.nola.gov/news/august-20

... #nolaprogress #cityofyes @cityofnola



12:21 PM - 4 Sep 2019

Joint SWBNO / DPW Infrastructure (JIRR) Program

Completed Projects



| <u>Project Name</u> | <u>Award Amount</u> | <u>Notice to Proceed</u> |
|--|---------------------|--------------------------|
| <u>Village De L'Est Group A</u> | \$3.6M | 11/13/2017 |
| <u>LNW Northwest Group A</u> | \$4.7M | 12/14/2017 |
| <u>Lake Terrace & Oaks Group A</u> | \$2.4 M | 01/29/2018 |
| <u>Read Blvd East Group A</u> | \$3.9 M | 12/04/2017 |
| <u>Gentilly Terrace Group A</u> | \$2.2 M | 01/08/2018 |
| <u>LNW Northeast Group A</u> | \$3.4M | 01/08/2018 |
| <u>Lakeview North Group A (INC)</u> | \$2.3 M | 05/11/2017 |
| <u>Lakeshore Group A</u> | \$1.1 M | 04/23/2018 |
| <u>Lakewood Group A</u> | \$1.6 M | 06/11/2019 |

Joint SWBNO / DPW Infrastructure (JIRR) Program

Projects Currently Under Construction



| <u>Project Name</u> | <u>Award Amount</u> | <u>Notice to Proceed</u> |
|--|---------------------|--------------------------|
| <u>Read Blvd West Group A</u> | \$4.8 M | 01/08/2018 |
| <u>West Bank Group A (VAR)</u> | \$3.7 M | 04/23/2018 |
| <u>Lakeview South Group A</u> | \$5.8 M | 07/12/2018 |
| <u>Filmore North Group A</u> | \$4.5 M | 02/04/2019 |
| <u>West End Group A</u> | \$5.6 M | 02/12/2019 |
| <u>St. Claude Group A</u> | \$3.8 M | 02/04/2019 |
| <u>Breakwater Drive (North Roadway - Dead End)</u> | \$5 M | 07/01/2019 |
| <u>Taft Place Reconstruction</u> | \$2.2 M | 07/08/2019 |
| <u>Filmore South Group A</u> | \$4.4 M | 08/12/2019 |
| <u>Little Woods Group A</u> | 14 M | 08/01/2019 |
| <u>Mid City Group A</u> | \$6.3 M | 07/29/2019 |
| <u>Village De L'Est Group B</u> | \$4.7 M | 07/15/2019 |



Joint SWBNO / DPW Infrastructure (JIRR) Program

Projects Currently Advertised

| Project ID | Project Name | Construction Start |
|------------|------------------------------------|--------------------|
| RR109 | RR3 - LNW Northwest Group B (FRC) | Winter 2019 |
| RR132 | RR3 - Navarre Group A (FRCPI) | Winter 2019 |
| RR133 | RR3 - Pines Village Group A (PMOI) | Winter 2019 |
| RR145 | RR3 - Read Blvd East Group B (PC) | Winter 2019 |
| RR146 | RR3 - Read Blvd East Group C (PC) | Winter 2019 |
| RR182 | RR3 - Treme-Lafitte Group A (INC) | Winter 2019 |
| Total | | Approx. \$40M |

Joint SWBNO / DPW Infrastructure (JIRR) Program

2020 Construction Forecast

| | # Of Projects Forecasted to Begin Construction | Approx. Construction Cost |
|---------|--|---------------------------|
| Q1 2020 | 7 | \$60M |
| Q2 2020 | 21 | \$141M |
| Q3 2020 | 11 | \$88M |
| Q4 2020 | 10 | \$100M |
| Total | 49 | \$389M |

Infrastructure Accomplishments

Fair Share - 2020

- **Will lead to more than doubling the Department of Public Works Maintenance staff by then end of 2022**
 - 42 additional employees
 - The increase in staff will also allow DPW to bring a number of tasks in-house and increase overall productivity
- **Will establish five additional maintenance inspectors (for a total of 10), which will do the following:**
 - Inspect and provide next steps for all 311 cases the same week as complaints are logged, effectively cutting response times by 50 percent
 - Provide mandatory inspection of all permits issued in Public Right-of-Way and ensure that City standards/specifications are being followed, effectively reducing future 311 complaints from non-compliance in the Public Right-of-Way
 - Monitor City-wide for unpermitted activities and assist in sending out notices to violators
- **Will allow for purchasing 28 pieces of new equipment, all of which will help the crews to operate more efficiently, including:**
 - Four Vac Trucks
 - Three Pothole Patchers
 - Two Dump Trucks
 - Four Excavators
 - Two Skid Steers (Support CB/MH and Sidewalk Crews)
 - Nine Pickup Trucks
 - Four Trailers



Infrastructure Accomplishments

Fair Share - 2020

- **Will lead to 72,000 catch basins being cleaned on a 2-3 year cycle**
 - Information about catch basin cleanings and assessments can be tracked on the City's catch basin status map: <https://nola.gov/dpw/catch-basins/>
- Will establish three exclusive ditching crews that, when working in conjunction with drainage crews will provide comprehensive drainage improvements on a block by
 - 1) re-establishing ditches and
 - 2) installing culverts under driveways when needed
- **Will enable the maintenance contractor to permanently pave more than 1,500 cuts annually**
- **Will establish the following crews:**
 - One additional alley crew in Lakeview – allows for **ALL** alleys to be addressed **EVERY** year
 - Two sidewalk repair crews that will handle 311 cases
 - Two catch basin / manhole repair crews that will handle 311 cases
 - **One pothole crew in each of the five council districts**
 - **One pavement patching crew per council district and one for the DDD**



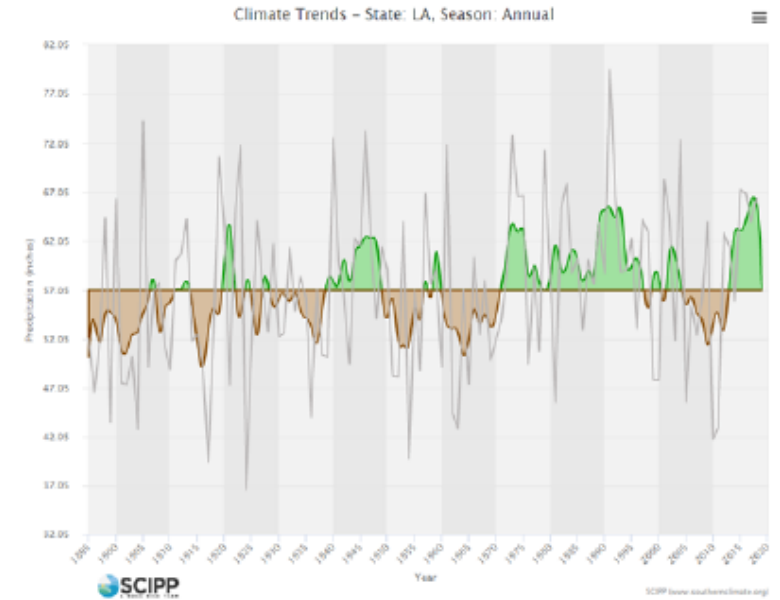
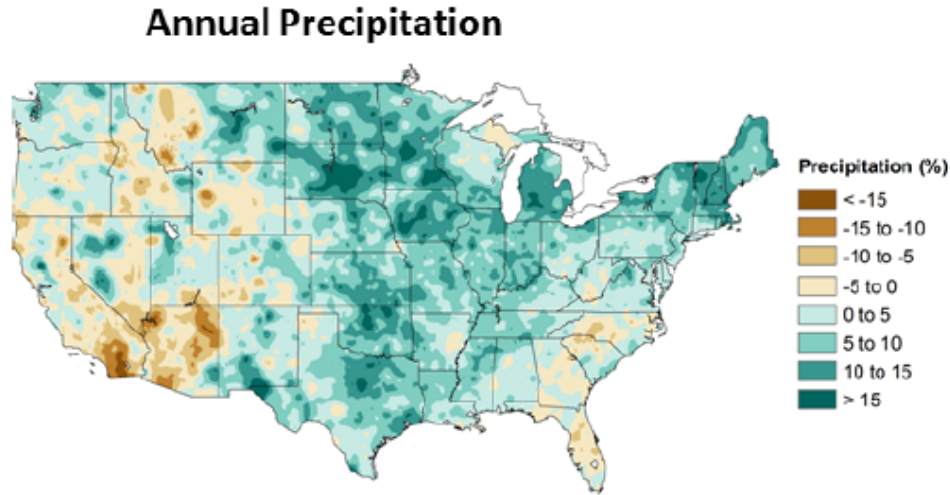
Infrastructure Accomplishments

Fair Share – By 2021

- DPW Maintenance will have **12 Vac crews operating**
- Funds from one-time equipment purchases allow for **25 blocks of Asphalt Mill / Overlays and 25 blocks of concrete panel replacements** where needed (this number will increase in subsequent years)



Theoretical Changes



- Slight observed trend in annual precipitation but increases in moisture have been more significant, changes are likely to be found in intensity, duration, or frequency.
- “A shift in the nature of precipitation events, favoring more intense events and less frequent events” (Trenberth 2011).
- “It never rains but it pours”.



Infrastructure Accomplishments

HMGP / NDR Highlights <https://nola.gov/resilience/>

- In progress on two major green infrastructure/drainage projects (Hagan Lafitte and Pontilly) worth **\$21.3M** adding more than 10 million gallons of stormwater storage to the system.
- Received the final funding approval for the **\$16.3M** HMGP portion of the Mirabeau Water Garden project, which will store up to **10 million gallons of storm water** on the 25-acre site.
- Reached 100% Design on the Broadmoor DPS 01 project, which includes nine New Orleans neighborhoods and will store up to **13 million gallons of storm water**.
- We recently received FEMA approval on the City Park Storm Water Improvements that includes a system of new weirs that when complete, will store up to **49 million gallons of storm water**.
- We have also put more than **\$87M** in new projects in design through the HUD-funded Gentilly Resilience District.

Hagan Lafitte Project

Easton Park Underground Storage Tanks (Will Hold 1.2 Million Gallons of Water)



South Galvez Street Green Infrastructure Features

Pervious Parking Lanes can hold roughly 126,000 gallons of water – more than 1,500 bathtubs full of water



Cherokee Street Green Infrastructure Features

Rain Gardens and Pervious Parking Lanes



Infrastructure Industry Day



Monday, September 30, 2019 | 11:30 – 1 P.M.

New Orleans Regional Planning Commission

10 Veterans Memorial Boulevard, New Orleans, LA 70124

Free to Attend / Registration is Required: shorturl.at/buJU0

Topics:

Accountability

Project Schedules and Progress

Avenues for Professional Relationship Building

DBE Participation – Under \$5M Threshold Projects