

A watershed moment

With money and public attention focused on the issue, Baton Rouge is poised to address its decades-old flooding and drainage problems. But does it have the will to really change?

By **Stephanie Riegel** - September 8, 2021

In the five years since the historic August 2016 flood, members of Louisiana's congressional delegation have secured more than \$2.6 billion for the state, nearly one-third of which is heading to East Baton Rouge Parish to address longstanding drainage and flooding problems.

The money is coming from different federal sources and will fund statewide programs like the Louisiana Watershed Initiative, local planning efforts like the East Baton Rouge Stormwater Master Plan, and long overdue capital projects like the Comite Diversion Canal.

The huge influx of money comes as there appears to be amped-up public engagement—and angst—around the issues of drainage and flooding. In the months since a May 17 “rain event” caused flooding in neighborhoods that had never taken on water, residents have become increasingly vocal, speaking out against new developments they fear will make flooding problems in their neighborhoods worse.

A similar dynamic is playing out in neighboring parishes. Ascension and Iberville have even enacted temporary moratoriums on new development while parish leaders try to get a better handle on how to mitigate flooding in the future.

Is the Capital Region, with resources in hand, finally getting serious about solving its longstanding flooding and drainage problems?

Perhaps. But some question whether things will really change. Because even while planning and projects are in the works, development continues, as it has for decades, in areas at high risk for flooding, or what is generally referred to as the floodplain.

In recent months, several projects in East Baton Rouge Parish, located wholly or partially in the floodplain, have been approved for development over the strenuous objection of nearby residents.

And in August, the Metro Council [scrapped a proposed ordinance](#) that would have tightened the regulations for new development in areas at high risk for flooding, after developers said the measure was unworkable and potentially illegal. The council will take up a new watered-down version of the ordinance later this month.

Taken together, the actions have fueled a longstanding perception that the development community calls the shots when it comes to policy about how and where Baton Rouge builds.

"I would clearly say it is the perception of many homeowners that the development community, the growth coalition dictates policy," says Ed Lagucki, president of the Federation of Greater Baton Rouge Civic Associations. "That is the perception I have gathered listening to people over the past five years."



(Click photo to enlarge.) (Collin Richie)

Developers bristle at the criticism, which they say is unwarranted. More to the point, they note that numerous changes have been made since 2016 to the rules governing

development in the floodplain. These new regulations, at least in East Baton Rouge Parish, require developers to build higher, detain more stormwater on site and allow for more natural green space in developments, among other things.

“Just because something is in the floodplain, doesn’t mean it shouldn’t be developed,” says Larry Bankston, executive director of the Baton Rouge Growth Coalition. “It’s way too complicated to say someone building something in the floodplain is causing flooding.”

This is true. It’s also true that the development pattern of the past 50 years in the Capital Region—which has occurred throughout the natural watershed, where forests and pastures have been replaced with asphalt and concrete—is one of the major contributing factors to flooding, experts say.

But it’s an oversimplification to blame the development community entirely for this pattern of growth. Developers respond to market demand, delivering what buyers want where they want it. In the Capital Region, the desirable location is increasingly southeast East Baton Rouge, Livingston and Ascension parishes, much of which lies in the natural floodplain.

As long as Baton Rouge continues to grow and migrate in this direction, it will have to do things differently and make hard choices. Does it have the collective will to really change?

“After the 2016 flood, parish leaders promised us things would be different,” says Doug Daigle, a citizen activist, who has opposed projects proposed near his Jones Creek Road neighborhood. “But projects are still moving forward, and we continue to allow development in the floodplain. We have an opportunity now. I’m afraid we’re blowing it.”



LET’S GET TECHNICAL

Words matter, and it’s easy to confuse floodplains with flood zones, watersheds with wetlands. Here’s a quick glossary.

FLOOD ZONE: An area on a FEMA flood map that is at a particular risk for flooding. Flood zones are determined based on the area’s risk for flooding each year, though the maps are not updated often enough to be completely reliable, especially as storms become more frequent and unpredictable.

FLOODPLAIN: An area at a high risk for flooding based on FEMA flood maps.

WATERSHED: An area of land that drains all the streams and rainfall to a common outlet, such as the Amite River. Watersheds are regional and can be defined on many different levels. Think of them like nesting dolls. Small watersheds are inside larger ones, which are inside even larger ones.

WETLANDS: Refers to soil types that retain certain waters and plants. Wetlands may be and often are located in watersheds and floodplains but can also be located on a mountain and seemingly dry, elevated lands.

DETENTION POND: A dry land area designed to store stormwater to mitigate flooding, like open green space in a subdivision that can be used as a playground or soccer field.

RETENTION POND: A wet area designed to store stormwater to mitigate flooding.

(Click graphic to enlarge.)

Cow pastures and cypress trees

This isn't the first time Baton Rouge has focused on its drainage and flooding challenges. As far back as 1972, planning department officials recommended setting aside land in the floodplain to use as green space and natural detention, which didn't happen. Nearly a decade later, the Metro Council briefly considered—and defeated—a measure that would have limited new construction in areas at high risk for flooding.

After the 1983 flood, which damaged more than 6,000 structures in Ascension, Livingston and East Baton Rouge parishes, there were more discussions, more studies, more plans.

Nearly 40 years later, there's not a whole lot to show for it. Among the solutions identified back then was the Five Tributaries project, which will reduce headwater flooding and backwater overflow into the Amite River Basin by clearing, snagging and widening the five sub-basins: Jones Creek, Ward Creek, Bayou Fountain, Blackwater Bayou, and Beaver Bayou. It wasn't funded until 2019 and is only now getting underway.

Meanwhile, development has continued in areas that for centuries served as the natural drainage basin for what we now call the Capital Region. As those forests and fields have been replaced by concrete and rooftops built high on fill, there simply aren't as many places for the water to go, even with mitigation measures.

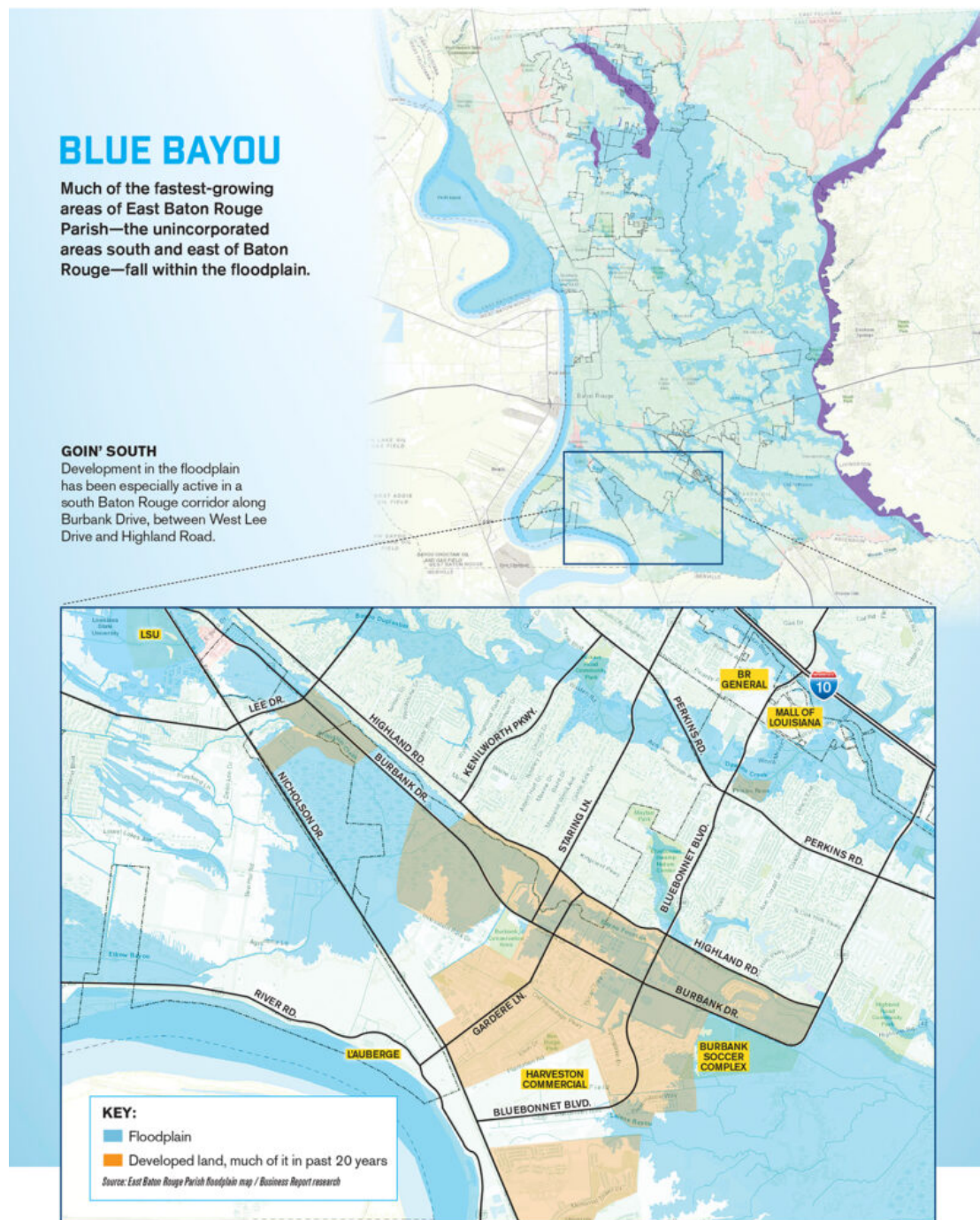
Longtime Baton Rouge residents have witnessed this growth and the impacts it appears to have had on their neighborhoods. Jim Bordelon, whose family property backs up to the Bluebonnet Swamp on Highland Road, spoke at a July Metro Council meeting against a proposed multifamily complex at @Highland, a mixed-use development at the intersection of Highland Road and Bluebonnet Boulevard adjacent to his property.

Since @Highland was developed in 2016, Bordelon has watched the swamp back up in heavy rains, sometimes flooding his property, sometimes overflowing into the @Highland parking lot. Adding more buildings and concrete to the site will only make things worse, he fears.

"I've seen floodwater levels increase since the early 1980s, after Bluebonnet Boulevard was extended to Highland Road and brought with it new development into the swamp's watershed," said Bordelon, whose family has owned the property for 57 years. "We have already allowed and are contemplating allowing even more development on land that was once unfit for anything but cow pastures and cypress trees."

The 240-unit complex was approved, with council members saying the developers could have moved forward with a denser development had they not approved the rezoning,

though the national arm of the nearby Church of Jesus Christ of Latter-day Saints recently filed a lawsuit seeking to block the project.



(Click graphic to enlarge)

Different perspectives

There is validity to the anecdotal observations of residents like Bordelon, according to experts, who say decades of filling in pastures and forests has altered the topography of the natural watershed, changing the way water flows and the rate at which it flows, besides just using it up.

"The problem is, since the 1960s we have filled in much of our floodplain," says Scott Nesbit, a wetlands ecologist and owner of the consulting firm Natural Resource Professionals. "That is one reason you are seeing more flooding now. We are paying for the sins of the past."

Nesbit acknowledges the issue is not that simple. There are other factors like maintenance, or lack thereof, little regional cooperation, and inconsistent building standards among neighboring parishes in the Capital Region. Yet, in some ways it is that simple.

"With development, they have raised the surface level of the land with fill—concrete and soil—and channelized the water into ditches and dredge channels," Nesbit says. "So all the stormwater goes into the floodplain a lot faster."



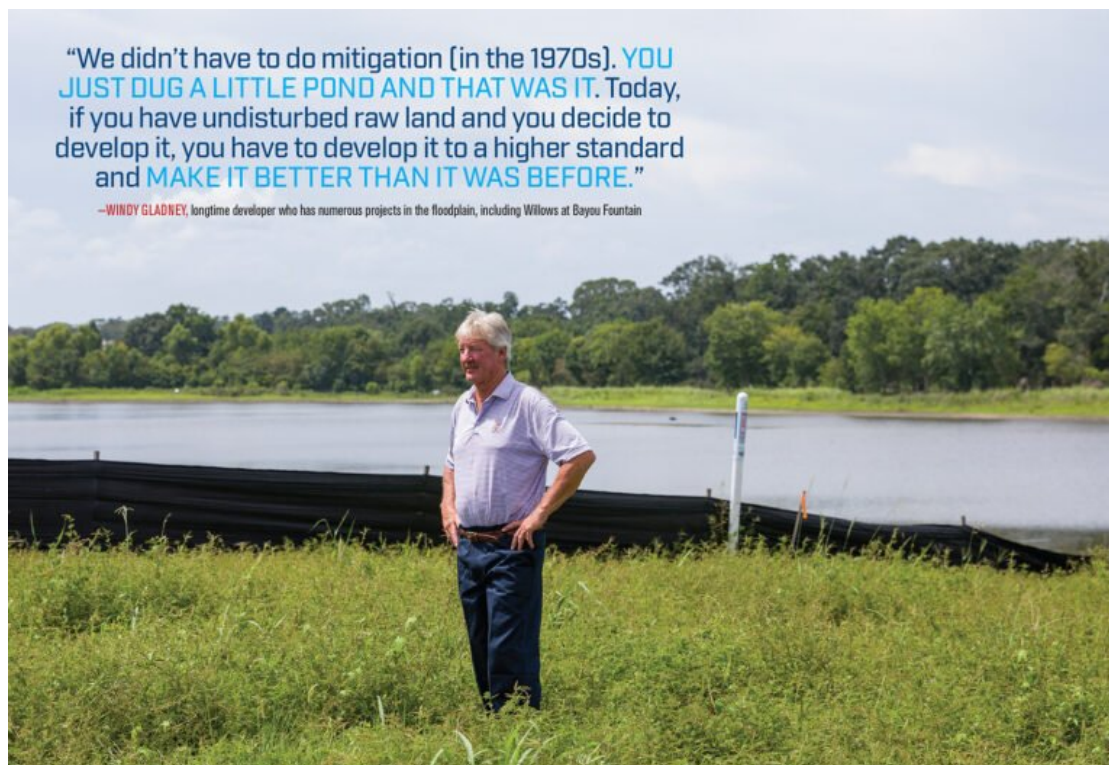
(Click photo to enlarge.) (Collin Richie)

Developers disagree. They point to new development codes, enacted by the parish since the 2016 flood, that are intended to make new neighborhoods safer from flooding. The standards require developers to build to a higher base flood elevation, to provide enough detention to account for a 25-year storm, which has a 4% chance of happening per year, as opposed to a 10-year storm, which has a 10% chance of occurring. Post-construction stormwater runoff is not allowed to exceed preconstruction runoff.

Developer Windy Gladney owns hundreds of acres in the floodplain along Burbank and Nicholson drives. He has already developed some of it like the 161-unit, single-family subdivision Willows at Bayou Fountain, at Burbank and Siegen Lane, which is entirely in a high-risk flood zone.

But Gladney plans to do more once Nicholson Drive is widened to four lanes. He says development standards are much higher than they were when he was starting out in the late 1970s.

"We didn't have to do mitigation back then. You just dug a little pond and that was it," he says, pointing out that he had to dig a 30-acre retention pond to elevate Willows at Bayou Fountain to requisite standard. "Today, if you have undisturbed raw land and you decide to develop it, you have to develop it to a higher standard and make it better than it was before."



(Click photo to enlarge.) (Collin Richie)

Dirty little secret

It is true that the standards are tougher today, and developers go to great lengths to raise low-lying areas above base flood elevation and provide enough on-site detention to protect residents.

The Preserve at Harveston, the first phase of Mike Wampold and John Fetzer's sprawling planned urban village straddling the Bluebonnet Boulevard Extension at Nicholson, was

located almost entirely in the high-risk flood zone until the developers dug a 60-acre retention pond and used the fill to raise the elevation.

The pond is marketed as a lake and is a natural amenity that enhances the development's appeal to buyers. By law, it's also required to retain stormwater runoff from other developments upstream, much as the land would have done before it was filled with houses and streets.

But there are a couple of problems with mitigation measures like detention and retention ponds. For one thing, they don't take into account the receiving body of water into which the stormwater will drain.

"Individual requirements for filling to meet the base elevation and detaining and discharging stormwater do not involve the receiving bayou or stream," Nesbit says. "The development may drain well, but the bayou receiving the drainage may be problematic backing up water. None of the East Baton Rouge Parish drainage requirements for individual developers addresses the problems with the Amite River, for instance."

The other problem with retention ponds is that if they're not done properly, like Harveston's, or aren't properly maintained they can erode and silt in after just a couple of years. It's not at all clear how many fall into the latter category because nobody keeps a list. But Metro Council member Denise Amoroso, who is currently dealing with the consequences of an eroding retention pond in her district, says it's the dirty little secret in the development community.

"It can cost millions of dollars to maintain these ponds and some of these little tiny subdivisions with 25 or 30 homes may not even have an HOA, much less collect money for maintenance. How can they afford it?" she says. "The city-parish is supposed to check but they're stretched too thin. Nobody inspects."



MIXED USE: While the already-built residential section of Harveston is in the floodplain, the soon-to-built mixed-use portion on land along Bluebonnet Boulevard to Nicholson Drive is not. (Collin Richie)

Actually, the burden for maintenance and inspection legally falls to the property owners, which, in the case of most subdivisions, would be the HOA. They're required to submit the results of an annual inspection to the city-parish.

But most residential developments do not adhere to the regulation, and the city-parish has no recourse to enforce compliance, according to Assistant Chief Administrative Officer Kelvin Hill.

"I am not aware of any process the city-parish has in place to really enforce that," he says. "I think all that needs to be looked at and at some point probably will be.

Lack of maintenance extends beyond retention ponds in individual subdivisions to drainage infrastructure throughout the parish. Storm drains are clogged. Creeks, canals and channels are overgrown and need clearing. But there has never been a recurring source of revenue, like a parishwide fee, to fund maintenance. Until recently, city-parish leaders never made it a priority.

Developers say this is as much a part of the problem as anything.

"New development is not the cause of flooding," says Bankston with the Growth Coalition. "It is mainly the lack of continual maintenance in the floodplain."

Currently, hundreds of millions of dollars in federal funds have been appropriated to pay for clearing and snagging local drainage canals.

But some of those projects have been on the books for 30 years or more. In other words, they will only get Baton Rouge caught up to where it should have been in 1990—when there was a lot less development in the floodplain than there is today and storms were less frequent and intense.

“The Comite Diversion Canal was first proposed in 1983 and the Five Tributaries project was proposed in 1992,” says U.S. Rep. Garret Graves, who has been instrumental in securing most of the federal funds flowing to the Capital Region. “So it’s great we finally have the money to do these projects but are we preparing ourselves for the 1990s? Think about that.”

Undue influence?

Daigle, the Jones Creek-area resident, does think about it a lot. He has spoken out at Metro Council and Planning Commission meetings to oppose developments in his area because he and his neighbors have seen flooding increase over the years.

In August, a developer scrapped plans to bring a 23-unit townhome development, The Park at Jones Creek, to the Metro Council for a rezoning request after it was clear the council wouldn’t approve it, even though the Planning Commission had approved it just weeks earlier.

It was one of the few victories Daigle has witnessed, and he’s worried that if development is not paused temporarily while the city-parish gets a better handle on its flooding problems, all the planning, projects and federal money flowing this way will be for naught.

“If they don’t stop approving all these projects in the floodplain it will undo all the good they have done,” Daigle says. “By the time they get around to completing all the projects, if they keep approving all this new development in the meantime, we’ll be right back to where we are now.”

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—U.S. Rep. Garret Graves, who has been key to securing federal money to address the region’s flood and drainage issues

(Click graphic to enlarge)

But East Baton Rouge Parish does not appear interested in a building moratorium, even a nine-month ban like that posed by the Ascension Parish Council earlier this year. To the contrary, the Metro Council scrapped its plans to consider a so-called moratorium on new development in high-risk flood zones under pressure from the development community.

The measure was never actually a moratorium, but it would have tightened building restrictions on any new construction in the floodplain.

But the Baton Rouge Growth Coalition objected to several key provisions in the measure, and helped city-parish leaders rewrite a less-restrictive version that will be introduced at a Metro Council meeting in September.

The new version is so changed from the original, it effectively accomplishes nothing, says Lagucki, the federation president.

“We were very disappointed,” he says. “We don’t see these as significant changes to the building code.”

Metro Council member Rowdy Gaudet’s original measure required any major development in a high-risk flood zone to provide detention for a 100-year storm—existing regulations require detention for a 25-year storm—and also to reduce by 10% the post-development runoff rate from the predevelopment rate. The revised measure gives developers the option to provide the enhanced detention or to reduce the stormwater runoff rate but doesn’t require they do both.

Also, the original measure applied to the final development plans of major subdivisions and planned developments, which are built out in phases over many years. The revised ordinance applies only to new developments, not new phases of existing ones.

Finally, the original measure applied to any development that is partly in the floodplain. The revised version applies only if at least 25% of the development is in the floodplain.

Bankston says the Growth Coalition didn't pressure the council to water down the ordinance but, rather, to address problems in the original draft and to produce a better, more workable law that everyone can live with and that won't be challenged in court.

Gaudet says he's proud of the process and the outcome.

"The development community was a part of this. They were at the table throughout the entire process, as were other groups and organization, so we got input from many different stakeholders and are very happy with the end product," he says.

But others say the way the process played out is an example of why things will not change in Baton Rouge.

"If you think there's any hope things are really going to change, the Gaudet ordinance tells you everything you need to know," says one frustrated engineer, who is familiar with the situation but spoke on the condition of anonymity.

Bankston counters that the Growth Coalition has been leading discussions around workable policies. "We don't dictate anything," he says. "We point out issues."

Nesbit, who is both a conservationist and also a consultant to developers, sees it from both sides.

"Developers are some of the strongest political influences in any parish, and what they do is serious business," he says. "They are powerful landowners. They bring a lot of money into the community. That doesn't mean they're doing anything wrong but they have a lot of influence and that is just the way it is."

A FLOOD OF FEDERAL FUNDS

In response to the 2016 floods, more than \$2.6 billion has been earmarked for Louisiana, some \$750 million of which is going directly to East Baton Rouge Parish. Here's a look at the various programs and projects the money will fund.



COLLIN WICHIE

EBR STORMWATER MASTER PLAN

\$15 MILLION

Funding Source: FEMA Hazard Mitigation Grant

What: A study of the entire parish drainage system to determine where trouble spots exist and what can be done about them.

Significance: It's the first comprehensive inventory of the some 60,000 drainage structures in the parish and will be able to help guide future development and development policies. It will also include a 20-year capital improvement plan for drainage projects and identify potential funding sources for them.

LOUISIANA WATERSHED INITIATIVE

\$1.2 BILLION

Funding Source: HUD Community Development Block Grants

What: A statewide program administered through the Office of Community Development that tackles drainage from a regional or watershed perspective. Each of seven regions in the state submits proposals to the state for flood mitigation projects. So far, Baton Rouge has received \$23.5 million in LWI funding, while another \$58 million has been awarded to projects in Livingston and Ascension parishes.

Significance: It's the first time the state is looking at flooding and drainage as a regional issue, which experts say is the only way to solve the problem long term.

FIVE BAYOUS/TRIBUTARIES PROJECT

\$255 MILLION

Funding Source: U.S. Army Corps of Engineers

What: Decades-old projects that involves dredging, clearing, snagging and widening five major drainage channels in the parish: Bayou Fountain, Beaver Bayou, Blackwater Bayou, Jones Creek and Ward Creek.

Significance: It will help improve drainage and flooding and complete projects that have been on the books since the early 1990s.

COMITE DIVERSION CANAL

\$340 MILLION+

Funding Source: U.S. Army Corps of Engineers

What: A 12-mile canal that will divert water from the Comite River to the Mississippi River, lessening flood levels on the Amite River and other bayous.

Significance: This is another project that should have been done in the 1980s and, when completed—which could still be years away—will alleviate flooding, especially in Central and surrounding areas.

VARIOUS EBR LOCAL PROJECTS

\$112 MILLION

Funding Source: FEMA Hazard Mitigation Grant

What: This is the same FEMA grant that funded the EBR Stormwater Master Plan. It is now paying for the design of several Baton Rouge projects that have already been identified in the early phase of the plan as key projects. They include things like creek widenings, bank stabilizations, and the removal of channel restrictions.

Significance: Not only will these projects improve the overall efficiency of the parish's drainage system, but it shows the effectiveness of having a master plan to inform policy and spending decisions.

DRAINAGE MAINTENANCE

\$80 MILLION

Funding Source: American Rescue Plan

What: This pandemic relief money can be spent on a variety of different projects. The Broome administration has pledged to spend a large chunk of it on long-overdue drainage maintenance—at least \$55 million over the next two years, and maybe more. In addition to the local funds, the state Legislature set aside \$600 million of its \$3 billion ARP allocation to create a Water Sector Council to spend money on drainage, wastewater and stormwater projects.

Significance: It's the first time Baton Rouge has a dedicated source of funding for drainage, but it's short-lived and the money has to be spent by 2025. If all these capital projects are to remain effective the parish will need to identify a permanent source of funding to pay for upkeep.



ASSOCIATED PRESS

(Click graphic to enlarge)

A path forward

What may help to ultimately bring together the various interests around future development in the community is the Stormwater Master Plan, which the Broome administration commissioned after the 2016 flood. Funded primarily with FEMA Hazard Mitigation Grant money, the \$15 million plan, currently in the works by the firm HNTB, is designed to reduce flood risk in the parish by developing sophisticated models of the parish's 11 watersheds, pinpointing trouble spots and their cause, and proposing a 20-year capital improvement plan of mitigation projects, along with identifying funding sources to pay for them.

To that end, HNTB is putting together the first comprehensive inventory of all drainage infrastructure in East Baton Rouge Parish, including information on 350 miles of channels, 800 bridges and culverts, and more than 60,000 subsurface drainage structures.

It's the kind of data-driven approach that informs best practices and it's what everyone says they want so they can develop reasonable policies around future development.

“Hopefully, when HNTB completes their work it will give us a better idea of what needs to be done,” Bankston says.

Nesbit agrees the plan holds tremendous potential because it encourages cooperation among parishes on everything from stormwater and drainage design to cooperative funding endeavors, incentives to protect regional functional flood storage areas and even developing a cost sharing approach.

But as HNTB senior project manager Melissa Kennedy points out, the plan will be only as good as the will of the policymakers and those who elect them to enact it. That may require hard choices.

Suppose the data shows a certain area really shouldn’t be developed”? That additional growth along Burbank or Nicholson really doesn’t make sense? Who’s going to be willing to make those hard choices and tough calls? Will residents who want to live in a floodplain development because it’s trendy or safe be willing to consider other options?

Is Baton Rouge really ready to take advantage of its watershed moment?

“There has to be a balance,” Graves says. “We have to balance the realities of living in the floodplain with economic development, private property rights and making sure we have the housing stock to meet the demand of the growth in the area.”
