EXHIBIT B

<u>Exhibit B</u>

DeKalb County's Response to Public Comments on Consent Decree Modification

DeKalb County carefully reviewed and considered the public comments submitted to the U.S. Department of Justice, Environmental and Natural Resources Division ("<u>DOJ</u>") concerning the Consent Decree Modification lodged on October 21, 2020 in the case styled *United States and State of Georgia v. DeKalb County, Georgia*, Civil Action No. 1:10-cv-04039-SDG (N.D. Ga.) (the "<u>Modification</u>").

The County appreciates the comments from its citizens. And, while it is not obligated to do so in this forum, the County is pleased to provide these detailed responses to the comments. It is critical to the County's current Administration for citizens to understand the scope and complexity of the work committed to under the Modification and for them to have confidence in their local government and its leadership. It is a new day in DeKalb County, and, since the 2017 election of County Chief Executive Officer ("<u>CEO</u>") Michael L. Thurmond, compliance with the Consent Decree and fixing the system the right way have been among the County's highest priorities—*even in the face of other significant and unprecedented challenges*. The CEO's approach to fixing the system the right way is fully incorporated in the Modification.

DOJ received 314 pages of public comments from thirty-nine (39) different commenters. The County has reviewed and considered all of these comments, and its responses are set forth below. After having considered these comments, the County maintains that the entry of the Modification is fair, reasonable, and in the public interest.

The County was pleased to see twelve (12) substantive comments in support of the Modification,¹ as well as two generally supportive or neutral comments

¹ See comments submitted by James Tsismanakis, *DeKalb Chamber of Commerce* [Dkt. 72-3 at 13-15]; Emory Morsberger, *Metro South Community Improvement District* [*id.* at 44-46]; Jason Lary, *Mayor of Stonecrest* [*id.* at 56-58]; Darren Eastall, *Former DWM Employee* [*id.* at 51-55]; Larry Johnson, *District 3 Commissioner* [Dkt. 72-4 at 3-5]; Steve Bradshaw, *District 4 Commissioner* [Dkt. 72-3 at 40- 42]; Mereda Johnson, *District 5 Commissioner* [*id.* at 34-36]; Lorraine

(which requested some improvements to the Modification).² The bulk of the County's responses below, however, address comments that were critical of the Modification or the County's performance under the original 2011 Consent Decree.³ Of the twenty-five (25) mostly disapproving comments, twenty-one (21) were relatively short emails from individual citizens commenting on a small handful of themes. Twenty (20) of these email comments⁴ raised, to varying degrees, one or more of the same five arguments. The County's response to these five arguments is provided in <u>Part II</u> below. The vast majority of technical comments and questions were raised in a ten-page submission by the South River Watershed Alliance ("<u>SRWA</u>"); the comments of the SRWA are separately addressed in detail in <u>Part III</u> below. The remaining comments are addressed in <u>Part IV</u>.

The County's response is organized in the following five parts:

Part I – Overarching Response to Comments. Several public comments appear to be based on a misunderstanding of critical information related to the County's operations or its implementation of the Consent Decree. In Part I, the County provides a brief

² See comments submitted by Kevin Jeselnik, *DeKalb County Watershed Capital Improvements Program Advisory Group* [Dkt. 72-3 at 214-219]; and Glenn Kurtz and Kimberly Estep, *South Fork Conservancy* [*id.* at 47-28].

³ The original consent decree was lodged with the District Court for the Northern District of Georgia (the "<u>Court</u>") on December 13, 2010 and entered by the Court on December 20, 2011 in the case styled *United States and State of Georgia v. DeKalb County*, Georgia, Civil Action No. 1:10-cv-04039-WSD (N.D. Ga.) (herein the "<u>Consent Decree</u>" or "<u>CD</u>") ([Dkt. 1-2; 38; 39]).

⁴ One comment raised issues related to a movie studio development in DeKalb County. *See* comment submitted by Samantha Cramer [Dkt. 72-3 at 4]. This comment is not relevant to the Modification and is not addressed in the County's response here.

Cochran-Johnson, *District 7 Commissioner* [*id.* at 23-25]; Dorian DeBarr, *Decide DeKalb* [*id.* at 17-19]; Teresa Hardy, *NAACP, DeKalb County Branch* [*id.* at 26-29]; Bill Floyd, *DeKalb Municipal Association* [*id.* at 37-39]; and Ann Hanlon, *Perimeter Community Improvement District* [Dkt. 72-4 at 115-116].

overview of overarching themes and background information that may be important to understanding the public comments and the County's responses.

Part II – Response to Five Most Common Citizen Criticisms. Twenty (20) of the thirty-nine (39) comments touch on one or more of the same five (5) arguments or positions. In Part II, the County addresses those five (5) arguments.

Part III – Response to South River Watershed Alliance ("<u>SRWA</u>") <i>Comments. SRWA submitted ten (10) pages of detailed technical comments and questions. SRWA has also sued the County under the federal Clean Water Act ("<u>CWA</u>") regarding the County's Wastewater Collection and Transmission System ("<u>WCTS</u>"),⁵ and SRWA commented on the original Consent Decree and intervened to object to its entry by the Court. In Part III, the County provides detailed responses to the SRWA comments.

Part IV – Response to Additional Comments. In Part IV, the County responds to miscellaneous comments not otherwise addressed above. This includes unsupportive comments related to a specific project, the County's use of engineers and contractors, and allegations of historical racism, as well as a few other unsupportive or neutral comments. In Part IV, the County also responds to the many positive comments received.

Part V – Glossary of Terms and Acronyms. Some of the comments and responses refer to technical terms. Throughout this document, the County explains its interpretation of these terms; for the sake of convenience, the County has also compiled these terms, as well as frequent acronyms, in Part V.

⁵ Throughout this document, the County's WCTS may also be referred to as the County's "sanitary sewer system" or "the system."

PART I OVERARCHING COMMENTS

At the outset, the County would like to address a number of important contextual points, as well as several recurrent misunderstandings exhibited in the comments. The County would also like to explain the importance of the Modification for the County, its citizens, their health and welfare, and the environment.

A. Important Background and Context on the County's Implementation of the 2011 Consent Decree.

In evaluating the appropriateness of the Modification, there are three critical contextual points that must be understood.

First, the County readily admits and acknowledges missteps in its management of Consent Decree implementation in the early years. But under the current Administration, led by CEO Thurmond, the County has been fixing the sanitary sewer system as one of its highest priorities and has been working steadily to do so. The Modification reflects a better understanding of the scope of the sanitary sewer system's deficiencies and an expedited approach to resolving them.

Second, The County has learned through implementation of the Consent Decree that its underserved populations, particularly in South DeKalb, were continuing to be left behind. And the Consent Decree was in several ways inhibiting the County's ability to serve these populations in the broadest sense of the word "service." The Modification rights this wrong.

Third, the County readily admits that the conclusions it reached about its sanitary sewer system during negotiations of the original 2011 Consent Decree, while grounded in data available at the time, ultimately proved to be incorrect. Most critically, at that time, the County incorrectly concluded its sanitary sewer system did not have significant capacity limitations. This determination was integral to the County's original settlement negotiations and, to a significant degree, set the County's expectations about the corrective action (*i.e.*, injunctive relief) needed to fix the system. The Modification, among other things, adjusts the corrective action based on the more informed conclusion that the system's capacity limitations are more extensive and require more significant system upgrades and rehabilitation.

1. <u>It's a New Day in DeKalb County</u>.

Many of the public comments suggest the County should not be trusted to implement the Modification. The County disagrees, of course, but recognizes that this lack of trust is not completely undeserved. Admittedly, in the early years of the Consent Decree, a number of contributing factors affected the County's implementation of the Consent Decree, such as leadership turnover, lack of proper oversight, and poor communication between the Department of Watershed Management ("<u>DWM</u>") and other County departments. That is history now, but it took a deliberate and dedicated review of the sanitary sewer system and its management, by the current Administration, to understand the depths of the dysfunction and to address the consequential impact on the County's ability to move forward addressing its sanitary sewer system the right way.

In 2016, the County elected Michael L. Thurmond as its new CEO. After taking office on January 1, 2017, CEO Thurmond quickly moved to prioritize implementation of the Consent Decree and fixing the sanitary sewer system. The CEO increased oversight of DWM, installed new leadership to coordinate the Consent Decree implementation, developed plans to ensure effective communication between County departments, its consultants and stakeholders related to the Consent Decree, implemented policies and procedures to expedite procurement, and increased efforts to promote transparency and accountability with respect to issues related to the County's sanitary sewer system. The impact of this pivot was significant and lasting. And the pivot clearly evidenced the CEO's commitment to balance the County's burgeoning economic development with the need to protect the environment that is foundational to the County's ability to attract businesses and residents within its borders.

State of the County Address: "A New Day" DeKalb County CEO Michael L. Thurmond March 30, 2017

"To comply with the letter and spirit of the Consent Decree and support economic development, I have initiated a full-scale review of all Watershed Department policies, assumptions, maintenance programs and construction schedules."

"I have no fears or doubts. We will be successful. This is not a one-person job. It's too big for one person. It's too complex for one person. It's too demanding for one person. But by working together, there is nothing that we can't accomplish."

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Since 2017, the County, under the CEO's leadership, has been able to accomplish a variety of important tasks required by the Consent Decree. Notably, the County has:

- Identified and inspected all sanitary sewer creek crossings in DeKalb County, inspecting 2,179 in 2017,⁶ 2,580 in 2018,⁷ 1,044 in 2019,⁸ and 1,601 in 2020.⁹ The County now has in place an expansive creek crossings re-inspection program to ensure all creek crossings are inspected on a schedule. Under that program, all creek crossings have been prioritized for 1-year, 2-year and 5-year re-inspections.
- Expanded sewer cleaning efforts to include, for the first time in decades, major trunk lines to recapture capacity lost to sediment and debris. For example, in 2018, the County cleaned 661 miles of sanitary sewer (representing 25% of the system),¹⁰ 739 miles in 2019 (28% of the system),¹¹ and 540 miles in 2020 (21% of the system).¹²

⁶ See Annual Report 6, Part I, Sec. 4 (submitted Mar. 1, 2018).

⁷ See Annual Report 7, Part I, Sec. 4 (submitted Feb. 27, 2019).

⁸ See Annual Report 8, Part I, Sec. 4 (submitted Mar. 2, 2020).

⁹ See Annual Report 9, Part I, Sec. 4 (submitted Mar. 1, 2021).

¹⁰ See Semi-Annual Report 13, Sec. 10 (submitted July 30, 2018); Semi-Annual Report 14, Sec. 10 (submitted Jan. 30, 2019); see also Declaration of Zachary L. Williams ("<u>Williams Decl.</u>") at \P 8(c).

¹¹ See Semi-Annual Report 15, Sec. 10 (submitted July 30, 2019); Semi-Annual Report 16, Sec. 10 (submitted Jan. 30, 2020); see also Williams Decl. at \P 8(c).

¹² See Semi-Annual Report 17, Sec. 10 (submitted July 30, 2020); Semi-Annual Report 18, Sec.10 (submitted Jan. 30, 2021).

- Enhanced tracking of cleaning activities to achieve a goal of cleaning 10 to 20% of the sanitary system annually, while identifying and routinely cleaning areas known to accumulate FOG.¹³
- Prioritized removing I/I from the system to ensure cost effective solutions to re-capture capacity in the WCTS (*e.g.*, by replacing 2,926 vented manhole covers through September 2019 and by utilizing Priority Areas Sewer Assessment and Rehabilitation Program ("<u>PASARP</u>") data to partner with homeowners to eliminate I/I into the system by repairing private laterals).¹⁴
- Increased social media FOG awareness campaign and expanded FOG education through partnerships with stakeholders including the DeKalb County School System and facilities that traditionally use a lot of grease products.¹⁵
- ▶ Removed over 25 million gallons of FOG from the WCTS.¹⁶
- Created GIS dashboards for Consent Decree data under the Sewer Mapping Program.¹⁷
- Inspected and recalibrated approximately 280 sewer flow monitoring sites, including installation of additional flow and rainfall monitors

¹³ See Semi-Annual Report 13, Sec. 10 (submitted July 30, 2018).

¹⁴ Consent Decree Modification at 3 [Dkt. 72-2]; *see also* Annual Report 6, Part II, Sec. 4 (submitted Mar. 1, 2018); Annual Report 7, Part II, Sec. 4 (submitted Feb. 27, 2019); Annual Report 8, Part II, Sec. 4 (submitted Mar. 2, 2020).

¹⁵ See Semi-Annual Report 14, Sec. 2 (submitted on Jan. 30, 2019).

¹⁶ Consent Decree Modification at 3 [Dkt. 72-2]; see also Annual Report 6, Part I, Sec. 2 (submitted on Mar. 1, 2018); Annual Report 7, Part I, Sec. 2 (submitted Feb. 27, 2019); Annual Report 8, Part I, Sec. 2 (submitted Mar. 2, 2020); Annual Report 9, Part I, Sec. 2 (submitted Mar. 1, 2021).

¹⁷ See Semi-Annual Report 13, Sec. 3 (submitted on July 30, 2018).

under the Flow and Rainfall Monitoring Program to support the dynamic modeling data collection effort.¹⁸

- Procured contract services for (1) chemical root control,¹⁹ (2) easement clearing,²⁰ and (3) CCTV and manhole condition assessment for Ongoing Sewer Assessment and Rehabilitation Program ("<u>OSARP</u>") areas.²¹
- Completed, since 2017, 14 major lift station improvements or upgrades, including Hammer Mill I, Royal Atlanta III, Johnson Creek, Hearn Road, American Fare (turned into gravity line), Lewis Way, Stone Mill I, Stone Mill II, Pennybrook, Fourth Street, Camp Creek, Leeshire, Kings Way, and New Gibraltar.²²
- Developed a hydraulic wet weather dynamic model for all sewer basins in the County.²³ And
- Rehabilitated 147,676 LF of gravity sewer under the PASARP by October 2019 and 401,844 LF by July 2020.²⁴

¹⁹ See Annual Report 6, Part I, Sec. 4 (submitted on Mar. 1, 2018).

²⁰ See id.

²¹ See Semi-Annual Report 17, Sec. 9 (submitted on July 30, 2020).

²² See Annual Report 6, Attach. A (submitted on Mar. 1, 2018); Annual Report 7, Attach. A (submitted Feb. 27, 2019); Annual Report 8, Attach. A (submitted on Mar. 2, 2020).

¹⁸ This estimate fluctuates annually. *See* Annual Report 7, Part I, Sec. 6 (submitted on Feb. 27, 2019); Annual Report 9, Part I, Sec. 6 (submitted on Mar. 1, 2021).

²³ See Annual Report 8, Part I, Sec. 7 (submitted on Mar. 2, 2020); Annual Report 9, Part I, Sec. 7 (submitted on Mar. 1, 2021).

²⁴ See Annual Report 9, Part I, Sec. 10 (submitted on Mar. 1, 2021); see also Williams Decl. at \P 8(M).

In 2019, the County was pleased to be awarded Collection Systems Gold Award by the Georgia Association of Water Professionals ("<u>GAWP</u>") for operating the system in an outstanding manner and views this award as important recognition of the efficacy of the CEO's commitments.²⁵

In 2020, the citizens reelected CEO Thurmond to another four-year term ending on December 31, 2024. CEO Thurmond continues to make fixing the system the right way a top priority. The County has spent an estimated \$200,000,000 during his tenure on the system and expects to spend another almost \$750,000,000 in capital projects through 2027.²⁶

2. <u>The County Must Serve Its Most Underserved</u>.

Through implementation of the Consent Decree the County learned that certain aspects of its implementation were having the unintended consequence of interfering with the County's ability to lift its most underserved communities. In particular, it was limiting the County's ability to promote economic development in predominately low-income and minority communities.

CEO Thurmond has acknowledged the long history of environmental racism, as well as the County's historical role in perpetuating these disparities.²⁷ In many ways, the Modification was structured in a way that would help the County to better serve its most vulnerable populations and to ensure that the estimated \$1,000,000,000 expected investment was not made with a blind eye to these disparities.

The Modification – specifically the CAP – will allow the County to support economic development in its underserved, low-income, and minority areas, while

²⁶ Williams Decl. at ¶ 14.

²⁷ Sophia Choi, *DeKalb CEO Says Systemic Racism Ultimately Behind Continued Sewage Spills in County*, WSB-TV (Oct. 19, 2020), available at <u>https://www.wsbtv.com/news/local/dekalb-county/dekalb-ceo-says-systemic-racism-ultimately-behind-continued-sewage-spillscounty/VR2SEVNZ2REVXEBYIMASA7HCEY/</u>.

²⁵ See Attachment A, Juanita Love, *DeKalb Watershed Management Receives Top Award*, The Atlanta Journal-Constitution (Dec. 4, 2019).

the system is being fixed. From CEO Thurmond's perspective, it would be unacceptable to force these communities to forego economic development for several more years. Many of these communities have disproportionately suffered the effects of sanitary sewer overflows ("SSOs"), as some of these areas contain many of the major capacity related repeat SSO locations on the Priority Fix List. Additionally, these areas will bear more of the burden of the disruptions associated with the lengthy construction projects needed to fix these capacity issues. With the Modification, these communities do not also have to suffer from additional sewer capacity-based obstacles to new housing, grocery stores, and new businesses. The Modification avoids this potential revictimization of these underserved populations.

3. <u>The County's System Had Different Issues than Originally</u> <u>Understood</u>.

In 2010, when the Consent Decree was lodged with the Court, the County understood that it did not have extensive capacity limitations within its system. It believed, for example, that the extent of stormwater flowing into its sanitary sewer system was minimal; in the industry, this is referred to as infiltration and inflow ("<u>I/I</u>") into the system.²⁸ This belief was well grounded in two engineering studies conducted in 2009, which provided a scientific basis for the County's position regarding I/I and the absence of significant capacity limitations. Additionally, the County's spill data indicated that most of its spills were tied to maintenance-related issues, like blockages caused by fats, oils, and grease ("<u>FOG</u>"). At that time, even

²⁸ DeKalb County operates a sanitary sewer that is *separate* from its storm sewer. In a perfect situation, only sewage would flow in the sanitary sewer system. However, stormwater (*i.e.*, rain, flood waters, and snow melt) does enter the system through cracks in the pipes, defective manholes, and unauthorized connections (*e.g.*, storm drains and gutters mistakenly tied into the sanitary sewer, rather than the storm sewer). This is referred to as infiltration and inflow (or "<u>I/I</u>," pronounced "eye-and-eye"). I/I limits the system's capacity to carry sewage during wet weather and leads to sanitary sewer overflows and spills. That is, when stormwater is able to enter the system it puts significant strain on the system's capacity, correlating to the size and severity of the given storm. I/I by its nature is widely dispersed and it can be difficult to detect the source and correct.

SRWA seemed to agree that FOG – and not capacity – was the most pressing issue with the system.²⁹

The County readily admits that its initial understanding of the extent of capacity limitations and I/I, as well as its emphasis on FOG, were misguided. To be sure, FOG needed to be addressed, but the County should have focused on I/I and on better understanding the full extent of capacity limitations from the outset, as a strategic matter. It turns out that the 2009 engineering studies and assessment of spills data covered a period of prolonged regional drought, which was not adequately accounted for in the County's assessments. With our changing climate, increased storm intensity and frequency have now produced several of the wettest years on record for the County.

In addition, soon after the Consent Decree was entered, the County, like much of the country, entered into a recession which chilled development. As the bleak financial situation rebounded, and development restarted, it occurred in some areas not previously contemplated. The I/I intensity combined with development in unanticipated areas, both of which were beyond the County's control, put additional stresses on the system, thus prompting the need for a closer assessment and additional consideration of various options to improve the system.

Central to the original Consent Decree are ten (10) Capacity, Management, Operations and Maintenance ("<u>CMOM</u>") programs to facilitate the County's *assessment* and rehabilitation of its system.³⁰ Through the implementation of these

²⁹ See Mem. of Law of the South River Watershed Alliance in Opp'n of the Proposed Consent Decree at 12 [Dkt. 29-1] (filed Nov. 7, 2011) (arguing that the "Consent Decree cannot be deemed reasonable or technically adequate because it does not contain any specific actionable goals toward the elimination of FOGrelated spills").

³⁰ The Consent Decree includes ten (10) CMOM programs, but the most onerous of the programs, the Continuing Sewer Assessment and Rehabilitation Program ("<u>CSARP</u>"), includes two separate major programs: the Priority Areas Sewer Assessment and Rehabilitation Program ("<u>PASARP</u>") and the Ongoing Sewer Assessment and Rehabilitation Program ("<u>OSARP</u>"). Consent Decree at VI.B.(x) [Dkt. 39]. The PASARP applies to a limited portion of the system that was the highest priority for assessment and rehabilitation. The OSARP applies to the whole system but was deployed first in areas not covered by the PASARP. For this reason, the County and others frequently refer to the eleven (11) CMOM

programs and the County's assessment of the system (and with the shift in development and the end of the prolonged drought), it became increasingly apparent that wet weather capacity limitations were a significant issue that would require much more extensive rehabilitation than originally planned. Thus, the County now faces a variety of complex construction projects needed to increase the capacity within certain portions of its system. Given the complexity of design, procurement timeframes, land acquisition concerns, and construction timelines, the County needs significantly more time than provided in the Consent Decree to rehabilitate its system.

B. Clarification of Common Misunderstandings and Erroneous Assumptions in the Public Comments.

The public comments indicate that many of the issues the commenters have with the Modification are grounded in a handful of common misunderstandings and erroneous assumptions. The following are a few key examples.

1. <u>The Modification and the Consent Decree Set the Floor, Not the</u> <u>Ceiling</u>.

Several commenters suggested that the Modification should include additional provisions requiring the County to commit to additional projects and actions. For example, one commenter requested that trail corridor establishment and trail construction be included as part of the Modification.³¹ Another commenter requested that the Modification specifically require elimination of all legacy stormwater connections to the sanitary system.³² Still another recommended the County conduct a supplemental environmental project (or "SEP").³³

programs, separating the CSARP into its two components. *See infra* Part I, Sec. A(3); Part I, Sec. B(2); Part II, Sec. D.

³¹ See comment submitted by Glenn Kurtz and Kimberly Estep, South Fork Conservancy [Dkt. 72-3 at 47-48].

³² See comment submitted by Ash Miller [Dkt. 72-4 at 17-68].

³³ See comment submitted by Kevin Jeselnik, *DeKalb County Watershed Capital Improvements Program Advisory Group* [Dkt. 72-3 at 214-219].

The County believes that these suggestions are laudable but misplaced. The Modification (and the Consent Decree) establishes what the County must do over the coming years to achieve compliance with the Clean Water Act and the Georgia Water Quality Control Act. As CEO Michael Thurmond has said, the Consent Decree, even in in its modified form, establishes the floor, not the ceiling, for the County's management of its system. While the County welcomes and will consider such innovative ideas from the public, it would be inappropriate to include such additional steps in the Modification. These suggestions reflect aspirations for the County's elected officials to weigh, rather than judicially enforceable requirements targeting Clean Water Act compliance.

The fact is that CEO Thurmond has already proven his commitment to going above and beyond what the Consent Decree requires. As a primary example, the CEO funded and supported South River clean-up activities and contributed over \$500,000 to acquire a trash trap requested by SRWA.³⁴ Projects of this nature are undoubtedly important and serve to improve the County, but they are not directly relevant to the goals of the Consent Decree or appropriate for inclusion in the Modification.

To the extent citizens have such aspirational views and ideas, they are encouraged to reach out to their elected officials. These elected officials are best positioned to make tough decisions related to the sometimes-competing interests of citizens. Unlike these public forums that allow elected officials to make decisions based on a variety of factors, the Modification establishes what the County must do to address its system. Thus, while the County encourages aspirational views of how it should operate and will continue to receive comments from citizens in the public engagement context, it does not support agreeing to those aspirations in the context of a civil enforcement matter.

2. <u>The Consent Decree and the Modification Cover the *Entire* County</u>.

A second common misconception that is revealed through the comments is that the Modification applies to only a part of the WCTS. To the contrary, the Modification applies to the *entire* County.

³⁴ See, e.g., WSB-TV, DeKalb County Sends Army to Clean Massive Trash Piles Along Banks of South River (Jan. 17, 2019), available at https://www.wsbtv.com/video?videoId=906079509&videoVersion=1.0.

DeKalb County's WCTS consists of an estimated 2,600 miles of sanitary sewers, 66 lift stations, and an estimated 61,500 manholes. Indeed, DeKalb's WCTS is one of the largest in the Southeast. Approximately 80% of the WCTS is 8-inch diameter pipe, but the County also has larger diameter pipes, including trunk sewers, which range from 18 inches to 5 feet in diameter. The County is divided into three sewer basins: Intergovernmental, Snapfinger, and Pole Bridge. Intergovernmental conveys flow to neighboring utilities as governed by interjurisdictional agreements. All flows in the Snapfinger Basin and Pole Bridge Basin are treated at the County's Snapfinger Advanced Wastewater Treatment Facility ("<u>AWTF</u>") and Pole Bridge AWTF, respectively.

The Modification applies to this whole system and to the County's operation of this whole system. The Consent Decree required development or enhancement to ten CMOM programs: (i) a spill response program (the Contingency and Emergency Response Plan) (CD ¶ 15); (ii) a FOG management program (CD ¶ 17); (iii) a sewer mapping program (CD ¶ 19); (iv) a system maintenance management program (CD ¶ 21); (v) a system employee training program (CD ¶ 24); (vi) a system flow and rainfall monitoring program (CD ¶ 26); (vii) a system hydraulic modeling program (CD ¶ 28); (viii) a financial analysis program (CD ¶ 30); (ix) an infrastructure acquisitions program (CD ¶ 32); and (x) a continuing sewer assessment and rehabilitation program (CD ¶ 34). Each of these ten CMOM programs applied and still apply to the *whole* system. And, the Modification's two new program, the onerous Priority Fix List ("<u>PFL</u>") program and the Capacity Assurance Program ("<u>CAP</u>") will also apply to the whole system.

The origin of this mistaken assumption (that the Modification and original Consent Decree only apply to part of the system) appears to be grounded in a misunderstanding of one of the ten CMOM programs – the continuing sewer assessment and rehabilitation program. That assessment and rehabilitation program includes two distinct components – the PASARP and the OSARP. The PASARP applies to approximately 838 miles of sewer line, representing 32% of the system, that was determined to be a priority for assessment and rehabilitation based on criteria established in the Consent Decree. The OSARP applies to the whole system, but it was designed to be deployed first in areas outside of the PASARP (*i.e.*, the non-priority areas), which represents the remaining

approximately 68% of the system. Thus, the Consent Decree's continuous assessment and rehabilitation program covers 100% of the system.³⁵

Some criticizing comments seem to acknowledge that the Consent Decree and Modification apply to the whole system, and instead focus on the fact that the PASARP includes a set deadline for assessment and rehabilitation, but the OSARP does not. But this is an appropriate distinction based on the attributes of the portions of the system covered by each program. The PASARP includes older pipes and more fully developed parts of the County, where the most complex, capital intensive fixes are expected. The OSARP, on the other hand, is intended to represent a continuous management, operations, and maintenance program, similar to other CMOM programs, like the FOG program. The OSARP initially focuses on mostly newer pipes and in many cases smaller diameter pipes, which are appropriately managed continuously over time, but, over time, it addresses the whole system. This is a reasonable and appropriate approach for addressing the whole system.³⁶

More importantly and significantly here, the new PFL program included in the Modification will also apply to the whole system. It requires site specific deadlines where problem areas arise within the system, wherever that may be. Additionally, the new onerous reporting requirements, stipulated penalties, and CAP apply to the whole system. This is a comprehensive plan to address DeKalb County's unique system, and entry of the Modification is in the public interest and furthers the goals of these specific commenters, as well as the County and the Clean Water Act.

³⁵ See also DeKalb County Department of Watershed Management, *Priority Areas Sewer Assessment and Rehabilitation Program*, available at <u>https://www.dekalbcountyga.gov/watershed-management/consent-decree-cd</u> (noting that the OSARP "is intended to be maintained on a permanent basis by the County [and that] [i]n effect, the entire WCTS will be continuously assessed and rehabilitated").

³⁶ See also Opinion and Order, No. 1:19-cv-04299-SDG at 32 [Dkt. 57] (Aug. 31, 2020) ("The absence of a strict timeline for DeKalb to remediate the WCTS in non-priority areas seems to be another concession made by the government to reach the totality of the Consent Decree, which the Court must respect.").

3. <u>The County Has Robust Modeling Capabilities.</u>

Several comments argue that the County cannot assess its system, select the required projects, and commit to a timeline to complete those projects without first having completed the development of a *dynamic* (as opposed to a *static*) model. As explained in more detail below,³⁷ the County has robust modeling capabilities, which enable it to accurately assess and determine the appropriate courses of action to remedy the system.

The County completed development of a *static* hydraulic model in December 2017.³⁸ The County readily acknowledges that it would have been better to have developed a *dynamic* model by that time. The prior County Administration, recognizing model development was behind schedule, followed the advice of its third-party consultant and developed and operated a conservative static model, with the primary benefit being the static model could be developed more quickly. Upon notification by the County of this changed course, personnel from both the U.S. Environmental Protection Agency ("<u>EPA</u>") and the Georgia Environmental Protection Division ("<u>EPD</u>") agreed with this action.³⁹ This static model enables the County to assess its system, identify capacity constraints, and approve new connections in accordance with stringent and protective procedures and criteria. It, in connection with other assessment tools, allows the County to identify and plan for capacity projects.

Additionally, the County now has a *dynamic* model. The dynamic model has been peer reviewed and is fully capable of validating the earlier system assessments and planned projects developed without it. The County will continue to use this dynamic model to verify assumptions and decisions made with respect to system rehabilitation. *The dynamic model will not, however, be used to certify new connections unless and until the preconditions for its use are satisfied – namely that the Modification is entered by the Court and EPA/EPD have approved*

³⁷ See infra Part III, Sec. A.

³⁸ Annual Report 6, Part I, Sec. 7 (submitted Mar. 1, 2018).

³⁹ Consent Decree Modification at 4 [Dkt. 72-2].

*the model.*⁴⁰ The County coordinated with EPA/EPD in this model's development (and with its earlier planned use for the static model) and submitted reports on the model for EPA/EPD approval on September 30, 2020. Final reports were certified and submitted in accordance with submittal procedures from the Consent Decree on April 2, 2021. To be clear, nothing prevents the County from using this model or any other useful tool for planning purposes. The only limitation is that it cannot be used for new connection certifications until after both the Modification is entered and EPA/EPD have approved its use.

4. <u>The County Has Demonstrated It Can Be Trusted</u>.

Several comments suggest that EPA/EPD, the Court, or another third-party should play a key role in implementing the Modification. For example, several commenters suggest that a third-party should make decisions about whether to authorize new connections. Other commenters request that the Court appoint a special master to oversee the implementation of the Modification.

Other commenters raise a variety of concerns related to the County's ability to use professional judgment in certain areas or to certify requests for new connections or for increases in flow without oversight. These commenters suggest that the County may have a conflict of interest in these instances and that the Modification needs to provide a mechanism to allow the EPA/EPD to have greater oversight over the County.

As an initial matter, since 2017, the County has demonstrated that it can be trusted and that it is committed to rehabilitating its WCTS to reduce instances of SSOs. The numerous accomplishments of the current Administration outlined in Part I, Section A(1) above evidence the County's commitment to the system and compliance with the Consent Decree. Nonetheless, the Modification and Consent Decree provide an appropriate level of transparency, agency oversight, and accountability.

For example, the Modification provides a variety of mechanisms that allow EPA/EPD to oversee the County's progress under the Modification – including

^{See Consent Decree Modification, Appendix D (CAP) at Sec. 1.4 [Dkt. 61-2].}

increased reporting requirements to both the regulators and the Court,⁴¹ along with significant stipulated penalties for improperly certifying requests for new connections or increases in flow.⁴² The County believes that the Modification provides the Agencies with sufficient oversight over the implementation of the Modification.

Further, under the Modification, when the County must use professional judgment, for new connections, it can only do so in limited ways prescribed by the Modification. In certain circumstances, this process may require Professional Engineers, who are licensed by the State of Georgia, and bound by various ethical obligations to make certain judgment decisions. A Professional Engineer's failure to follow the prescriptions of the Modification or professional obligations would come at a great price to the individual engineer and the County in terms of its goals to earn and maintain the trust of its citizens.

The fact of the matter is that this Modification provides significantly increased oversight – enhanced reporting, required filing of quarterly and annual reports with the Court, interim milestones, and many other public facing provisions that have been incorporated to build public accountability for the County and its leaders. The comments assume that EPA/EPD have no role in the ongoing oversight of the WCTS, when in fact, the regulators will have more of a role and more options to institute enforcement provisions for failure to meet expectations than they do under the original Consent Decree.

C. The Modification Is Critical to the Future of the County, Its Citizens, and the Environment.

1. <u>The Modification, in Particular the CAP, Will Help the County to</u> <u>Best Serve Its Citizens and Promote Economic Growth, While Being</u> <u>Protective of the System and the Environment</u>.

The County is committed to environmental stewardship, resolving the capacity-limitations of its WCTS, and ensuring compliance with the Clean Water Act and the Georgia Water Quality Control Act. At the same time, however, the County must balance this commitment with a number of other competing public

⁴¹ Consent Decree Modification at ¶¶ 9-10 [Dkt. 72-2].

⁴² *Id.* at \P 14.

interest factors, including the ability to encourage development in underserved areas of the County, approve new connections for new schools and hospitals, and a variety of other practical concerns. The County believes that the Modification is a fair and reasonable balance between these public interest factors.

First, the County will be required to rehabilitate the areas identified in the PASARP by December 20, 2027, as well as several other significant requirements, including adequately fixing all PFL locations and continued implementation of the suite of CMOM programs. Second, the Modification provides the County with the necessary flexibility, particularly through implementation of the CAP, to approve requests for new connections or increases in flow in a way that ensures capacity in the system without hindering economic growth and critical development. The County believes that the Modification strikes the right balance between these concerns and is in the best interest of the public.

2. <u>The Modification, Particularly the CAP, Is Especially Important to the</u> <u>County's Minority and Low-Income Communities</u>.

There are different views reflected in the comments related to the Modification's potential impact on minority populations in DeKalb County, especially those that live in underserved portions of the County. At least two public commenters suggest that the Modification should be revised to ensure that the County does more to address the capacity-related needs of the WCTS in these areas. Two other commenters, however, including one from the NAACP and another from a county commissioner elected to serve an historically "overlooked and left behind" district,⁴³ focus on the significant benefits of the Modification for these populations, suggesting that the Modification will actually allow the County to better meet the varying needs of minority populations in underserved areas in the County. This latter view reflects the County's perspective.

The County is committed to addressing disparities felt by minority populations living in underserved areas of the County. In the County's view, the Modification provides the best avenue for alleviating some of those disparities by not crippling much needed sustainable development in these areas in the short run, while allowing these areas to be improved over time through enhanced infrastructure and better economic development options. The fact of the matter is

⁴³ See comment submitted by Teresa Hardy, *NAACP* [Dkt 72-3 at 26-29]; and Larry Johnson, *District 3 Commissioner* [Dkt 72-4 at 3-5].

that low-income and minority populations have suffered the worst from DeKalb's historical SSOs, and moving forward over the next several years, many of these same communities will bear the brunt of the burden to fix the system. Much of the major trunk sewer work is in these neighborhoods. These populations will have traffic interrupted and be forced to tolerate construction noise and other disruptions. This work must happen – with or without a modification to the Consent Decree. But with the Modification, the County can encourage growth and development in these communities both in the near- and long-term. Without the Modification and the CAP, the County would not be able to authorize new connections and economic growth in these communities because these are the same areas where there are capacity limitations (which these projects are designed to alleviate).

So the question the County faces, before spending over \$1,000,000,000 to fix the system, is what happens to these areas over the course of these construction projects. The CAP provides the answer. The CAP allows growth – new grocery stores in food deserts, new high-quality sustainable businesses instead of gas stations and liquor stores, and new efficient housing in these areas. Without it, and without the Modification, the County would still spend this money, these populations will pay a larger percent of their take home income to cover the costs, they will suffer the consequences of construction, all while the more affluent – and frankly predominantly white – communities continue to enjoy the benefits of earlier, better investment in sewer infrastructure at a lower cost relative to their higher income.

The County believes that the Modification is in the best interest of all of its citizens – including minority populations located in underserved areas of the County.

PART II RESPONSES TO MOST COMMON CITIZEN CRITICISMS

Twenty (20) of the thirty-nine (39) comments received by DOJ were relatively short emails from individual citizens raising one or more of the following five (5) arguments: (A) the *dynamic* hydraulic model must be approved before the County can commit to the scope and timeline for system rehabilitation; (B) the Modification should have stricter deadlines for non-priority areas within the system; (C) the County's approval of new connections to the system should be done by a third-party or with strict oversight (*i.e.*, the County cannot be trusted); (D) the Consent Decree and the Modification do not cover the whole system; and (E) Modification implementation should include more transparency and public involvement. Three of these concerns are already addressed above in <u>Part I</u>.

A. The County Has Robust Modeling Capabilities.

A number of public commenters raise concerns related to the dynamic model. Some of these commenters suggest that the County cannot fully understand the capacity-related needs of its system without having a fully developed dynamic model or that the County cannot agree to the PFL or CAP without the model. Other commenters identify concerns about the accuracy of the model and those instances in the Modification where the County is permitted to use professional judgment when using the dynamic model. Many of these comments are addressed above in Part I, Section B(3), and some are more specifically addressed below in Part III, Section A(1)-(2), (11).

It appears that many public commenters misunderstand how models are used generally or how the dynamic model in this instance is designed and will be implemented. Models, although helpful, are simply a tool that are inherently limited based on data inputs and calibration. As a result, professional judgment is often used to interpret modeling results or improve their application.

In this instance, the County, through the use of expert modelers, developed seven models – one for each of the County's separately modeled areas. Those models were peer reviewed by an independent consulting firm, and are currently under review by EPA/EPD for use in the CAP. While the County must seek approval before using the model to approve requests for new connections or increases in flow under the CAP, the County is able to use the dynamic model for its own purposes – namely to evaluate the capacity needs of its WCTS and, where relevant, evaluate potential engineering solutions.

The dynamic model is only one of many tools that the County has at its disposal to evaluate its system. In fact, the County has closed-circuit television ("<u>CCTV</u>") data, smoke testing data, manhole condition assessments, and flow monitors, among other tools, to evaluate different aspects of its system.⁴⁴ Based on these tools, the County has been better able to fully understand the capacity needs of its system, which has allowed the County to request an extended schedule to

⁴⁴ See infra Part III, Sec. A(1).

rehabilitate the areas identified in the PASARP, identify those areas that should be included in the PFL, and request a CAP.

Models are adjusted over time to match the ever-changing conditions of the system. In this case, the County will continually update the dynamic model based on projects that increase capacity in the system or when new connections or increases in flow are added to the system.

B. The Modification's Deadlines and Milestones Are Appropriately Targeted to Priority Areas and Repeat SSO Locations.

Some commenters suggest that the Modification should be revised to include stricter deadlines for non-priority areas within the system.

The County disagrees with the idea that stricter deadlines should be imposed related to the County's efforts to rehabilitate portions of its system outside of those areas that have been identified as priority areas or where repeat SSOs have occurred. All deadlines and timelines imposed by the Modification were negotiated with EPA/EPD experts who understand the level of effort required to achieve the desired outcomes and who appreciate the need to prioritize the more problematic areas of the WCTS. The Modification already imposes significant requirements and penalties beyond those included in other consent decrees in the Southeast (*e.g.*, the PFL requirement). Moreover, the County is still bound by obligations in the Consent Decree to evaluate and rehabilitate non-priority areas.⁴⁵

C. Additional Third-Party Oversight Is Not Prudent or Required.

A number of public commenters raise concerns related to oversight and suggest that a third-party should be used to ensure the County's compliance with the Modification and that the County appropriately considers and approves requests for new connections. These commenters suggest that the County cannot be trusted to implement the Modification without oversight from a special master or increased oversight from EPA/EPD. To some extent, these comments are addressed above in Part I, Section B(4) and below in Part III, Section B (2).

⁴⁵ See Consent Decree, No. 1:10-cv-04039-WSD at 54-56 [Dkt. 39] (Dec. 20, 2011); see also Opinion and Order, No. 1:19-cv-04299-SDG at 4-6 [Dkt. 57] (Aug. 31, 2020).

The County disagrees with the assertion that a third party should be used to ensure compliance with the Modification or that the Modification needs to provide EPA/EPD with increased oversight over the County beyond what is already included in the Modification or the Consent Decree. As an initial matter, DOJ policy would not support the use of a special master in this case.⁴⁶ And, not inconsequentially, no party to the Consent Decree and Modification support the use of a special master.

Moreover, the County, as part of its good-faith efforts to negotiate an agreement with the EPA/EPD, agreed to a variety of increased oversight and reporting requirements in the Modification. The increased oversight and reporting requirements will ensure that EPA/EPD can maintain supervision over the County's implementation of the Modification without improperly impacting the County's and its elected officials' ability to make decisions, allocate resources, or otherwise govern. In the County's view, the Modification implements a variety of requirements – in addition to those already provided in the Consent Decree – that will ensure the County's compliance with the Modification.

For example, the Modification requires the County to comply with increased reporting requirements and attaches stipulated penalties for incorrect reporting in some instances. As required by the Consent Decree, many of these documents are required to be made publicly available on the County's document repository.⁴⁷ Moreover, EPA/EPD maintain authority to review certain submittals provided by the County (*e.g.*, the County's determination that a repeat SSO should not be counted for purposes of the PFL). If EPA/EPD disagree with the County's assessment on a particular point in these submittals, the Parties have the option to engage in Dispute Resolution to resolve the issue. This process allows EPA/EPD to have a direct role in the County's implementation of the Modification.

Additionally, the Modification provides for a variety of milestones, such as the requirement to complete and report on the minimum liner footage rehabilitated in a calendar year, and imposes deadlines, such as the requirement to fix PFL

See Pls' Mot. to Enter Rev. Modification to Consent Decree, Attach. 4 at 29-30 [Dkt. 72] (citing U.S. Dep't of Just., *Department Policy Regarding Special Masters*, at 2 [Dkt. 72-7]).

⁴⁷ See Consent Decree at ¶ 44 [Dkt. 39]; see also DeKalb County Public Document Repository, available at <u>https://www.dekalbcountyga.gov/watershed-management/consent-decree-cd</u>.

locations within established deadlines. Heavy stipulated penalties are associated with some of these deadlines and will help to ensure that EPA/EPD can both track the County's compliance and, if needed, penalize the County for any failure to adhere to terms of the Modification. Lastly, the Modification creates even more oversight by requiring reports and submissions be filed with the Court.

D. The Consent Decree and Modification Cover the *Entire* County.

Some commenters suggest that the Modification is inadequate because it does not require the County to repair its entire system. These commenters assert that the PASARP should be expanded to prioritize rehabilitation of the WCTS in other areas of the County.

The County addressed these comments above in Part II, Section B(2). As stated above, the Consent Decree and the Modification address the entire County. Through the PASARP, the Consent Decree places emphasis on certain areas where technical assessments have identified a need for more significant rehabilitation. Through the PFL, the Modification emphasizes areas that have experienced, or that experience in the future, repeat SSOs. While the PASARP applies only to a portion of the County, the PFL applies throughout the County, as do all Consent Decree and Modification programs and requirements, except for the PASARP. Prioritizing these areas that have been assessed to need special attention and that have experienced repeat SSOs is prudent and does not mean other portions of the system go unaddressed.

E. The Consent Decree and Modification Call for Significant Transparency.

Some commenters suggest that the Modification should include more requirements to ensure transparency and public involvement.

Under the Consent Decree, the County has continued to publish for public review the program documents and numerous reports required by the Consent Decree.⁴⁸ This includes eleven (11) CMOM program documents, a Supplemental Environmental Project Stream Cleanup Plan,⁴⁹ nine (9) annual reports, eighteen

⁴⁸ *See id.*

⁴⁹ The Supplemental Environmental Project is not a CMOM program, but it is a Consent Decree program.

(18) semi-annual reports, thirty-six (36) quarterly reports, a Supplemental Environmental Project report, and additional reports and documents.⁵⁰

The Modification includes significant revisions to reporting provisions and specific interim milestones, which will enhance transparency. For example, the Modification requires the County to provide information in each quarterly report to document and verify the County's assessment that an SSO is either capacity or non-capacity related.⁵¹ Additionally, the County is required to provide updates on the status of work to rehabilitate repeat SSO locations, including providing an explanation where the County fails to complete work that was previously scheduled to be completed. For semi-annual reports, the County will be required to report on interim milestones, including an explanation for failing to meet any interim milestone requirement. And, moving forward, the Modification requires that these reports and submissions be filed with the Court.

Beyond what is required by the Consent Decree and Modification, the County can and has done more to enhance transparency and public involvement. At the outset of the Consent Decree, the County established the DeKalb County Watershed Capital Improvements Program Advisory Group ("<u>CIPAG</u>"). CIPAG consists of eleven (11) members appointed by the County CEO and Commissioners.⁵² Its mission is "[t]o provide informed professional and citizen participation in the Watershed Management Department's Capital Improvement Program, the implementation of the County's consent decree with the Environmental Protection Agency[,] and the education of community members so the County makes the most effective use of available resources while ensuring DeKalb County's waters meet all federal and state water quality standards for the benefit of all residents and visitors."⁵³ Pursuant to this mission, CIPAG meets quarterly with DeKalb County Watershed management and legal staff, advisors,

https://dekalbcountyga.granicus.com/boards/w/968f9572ef2211df/boards/10020.

⁵⁰ See Consent Decree at ¶ 44 [Dkt. 39]; see also DeKalb County Public Document Repository, available at <u>https://www.dekalbcountyga.gov/watershed-management/consent-decree-cd</u>.

⁵¹ Consent Decree Modification at ¶ 9 [Dkt. 72-2].

⁵² See Watershed Capital Improvements Program Advisory Group Information Page, available at

⁵³ *Id.*

and members of the public to receive updates on DeKalb County's efforts to comply with and fulfill the terms of the Consent Decree.

Further, under the leadership of CEO Michael Thurmond, the current Administration has shown that it is deeply committed to transparency and public participation. With respect to the sanitary sewer system alone, the CEO has issued thirty (30) press releases, conducted eleven (11) townhall or community meetings, including four (4) state of the County meetings, and held five (5) news conferences covering a broad range of important topics, including, manhole covers replacements, FOG, roots, the hydraulic model, and backflow prevention. The CEO is paying attention to the details and in the community discussing them in frank terms. In the event that future administrations are not as forth coming or inclusive, citizens may, of course, address that through the democratic process and/or petition their elected officials for more transparency.

PART III <u>Responses to South River Watershed Alliance, Inc. Comments</u>

The following provides the County's responses to public comments submitted by the South River Watershed Alliance, Inc. ("<u>SRWA</u>"). The SRWA organized its comments using 14 specific references to text in the Modification and 13 specific references the CAP, which is Appendix D to the Modification. Following these references to specific text, SRWA provided several comments and questions related to the text. For ease of review, these references, as well as the associated comments and questions, are reproduced below in *italic font* in the order submitted by SRWA.⁵⁴

The SRWA submitted the overwhelming majority of technical comments and questions. But many these comments and questions are focused on *implementation* of the Modification and not the Modification itself. The Modification is a negotiated document that lays out the framework and requirements for the work and planning ahead, as well as EPA/EPD's oversight role. Many, if not most, of these forward-looking questions call for speculation and addressing hypothetical situations that to varying degrees may or may not

⁵⁴ The SRWA comments/questions are reproduced without editing, except that the references to "Comment/Question" have been revised to better reflect whether the text includes a comment, a question, or both.

occur. Nonetheless, the County has worked hard to address each comment and question raised.

A. DeKalb County Responses to SRWA Comments on the Modification

(1) MCD⁵⁵ Reference: "The County is in the process of developing a computerbased dynamic model for the County's WCTS" (P. 9, Sec. 28).

SRWA Comment: DeKalb County cannot complete assessment of their wastewater collection system and choose a plan for rehabilitation without the completion of a system-wide dynamic hydraulic model. When dealing with large and complex sewer systems that have significant sewage spills, it is critical that a comprehensive dynamic model be developed for each basin that is connected to each Wastewater Treatment Facility (WWTF). The interconnections within each independent system effect the capacities up-stream of each connection. The model must incorporate entire connected systems so that weak points can be identified, and system modifications can be developed. Only after this work is completed can the feasibility of specific options be developed to correct deficiencies, expand capacity for future development, and maintain the existing system. (Randall Grachek, P.E., Newfields. Mr. Grachek is a professional engineer with experience designing wastewater treatment plants and evaluating CSO / SSO systems).

DeKalb County Response: The County disagrees with Mr. Grachek's comment.⁵⁶ While dynamic hydraulic models offer some advantages over static

⁵⁵ SRWA uses the acronym "MCD" to refer to the Modification.

⁵⁶ The County is unaware of the extent of Mr. Grachek's professional qualifications or experience with wastewater collection systems. The County is advised by numerous internal and external experts on myriad aspects of its wastewater collection system. For example, Jacobs Engineering has extensive experience providing engineering and management services to assist operators of sanitary-sewer systems in addressing the capacity needs of their systems under a variety of regulatory requirements. This experience includes assisting various municipal authorities by providing a variety of services, including sewer system evaluation surveys, inflow and infiltration evaluations, system modeling and optimization, master planning, and regulatory compliance. For reference, more information related to Jacobs' experience is provided in <u>Attachment B</u>.

(or steady state) hydraulic models, it is simply wrong to suggest that the County cannot complete its assessment of its WCTS and identify a plan for rehabilitation without a dynamic model.

The County completed development of a static hydraulic model in December 2017 and used modeling results, along with several other tools described below, to inform decisions regarding rehabilitation recommendations. A static model was chosen over a dynamic model because it could be developed and used to assess the system more quickly. A dynamic hydraulic model simulates how flows change over time; a static hydraulic model, on the other hand, simulates flow at one point in time, in this case, the peak flow during a rain event.

A static, peak flow hydraulic model generally predicts higher flow rates (and less available capacity) than a dynamic simulation would. The static model, therefore, predicts capacity limitations more frequently and provides a more conservative indication of available capacity. This is because a static model assumes peak flows happen at all points in the system at the same time and shows these peak flows as cumulative at each point downstream in the system.

A dynamic hydraulic model more accurately accounts for time, specifically the time it takes for flows to travel downstream.⁵⁷ Put simply, a dynamic model is able to predict peak flows dynamically throughout the system – *e.g.*, at different points in time. Because of this, the dynamic model often predicts lower peak flows and more available capacity. For example, if upstream peak flows are expected to reach a downstream location when that location is not at its peak, the dynamic model would indicate that condition. The static model, on the other hand, would predict cumulative peaks at the downstream location and show less available capacity. Accordingly, even with identical inputs and assumptions with respect to flows, the dynamic model can show available (real) capacity, where the static

⁵⁷ It can take up to twenty (20) hours for sewage to flow from the most upper reaches of the County's system to the downstream most points in the system (where the wastewater treatment plants are located). The dynamic model better takes these temporal differences into account. By way of illustration, a dynamic traffic model would recognize that peak inbound traffic flows forty-five (45) minutes north of Atlanta will not reach the city center at the same time as peak inbound traffic flows twenty minutes (25) south of Atlanta. The static model would assume these peaks are fully cumulative when they reach the city center.

model would not. Thus, the static model is a useful tool in assessing capacity limitations and identifying rehabilitation needs.

In addition to the results of the static model, the County relied on data gathered from other assessment activities to identify rehabilitation projects within the system. These activities, used to identify structural defects and sources of extraneous flow such as I/I, include:

- 1. *CCTV data*. The County has collected extensive video evidence of the condition of its pipes/sewers. This data provides visible evidence of structural defects such as broken or collapsed pipes, and it provides visible evidence of I/I. The CCTV video also aids in identifying maintenance issues such as grease, debris, or roots within the system.
- 2. *Smoke testing data*. Smoke testing involves distributing smoke within the sewer system and observing where this smoke emits above ground, which provides information on sources of I/I. For example, if smoke is observed coming from storm drains or roofs/gutters, this indicates a direct pathway for rainwater to enter the sewer system. Similarly, where smoke is observed coming from the ground, it indicates an indirect connection from defective (leaking) customer service lines.
- 3. *Manhole condition assessments*. The County is in the process of completing condition assessment for 100% of its manholes. Based on structural condition, those manholes will be assigned a time period to be reassessed for defects. The manhole condition assessments provide visible evidence of manhole defects such as cracks in the wall, offset or damaged frames and covers, or root intrusion.
- 4. *Flow monitors*. The County has deployed over 250 long-term flow monitors, which show actual flow conditions and assist with identifying capacity constraints. The flow monitors collect depth and velocity data and provide real-world observations of the system's flows and capacity during dry and wet weather. This data is used to identify areas with high levels of I/I and to calibrate the hydraulic models (both the static and the dynamic models) and to verify the models' simulations.

With these condition assessment technologies, the County has performed condition assessment on 100% of its assets within the PASARP areas and

continues to reassess assets in the PASARP areas as needed as part of the OSARP program. The County has performed condition assessment on 43% of the assets in the OSARP areas to date resulting in complete assessments for 60% of the County's WCTS. With these assessments, the County has been able to determine the cause, location, and extent of structural and capacity issues within its systems and has developed its plans to rehabilitate its system. These plans involve specific projects and are well underway, particularly with respect to small diameter sewers (*e.g.*, 15-inch diameter or less). The County has a high degree of confidence that these plans to increase capacity and to rehabilitate defective manholes and sewer mains will significantly improve the performance of the system.

Finally, the County has developed a peer-reviewed dynamic model and has used that model to help validate the effectiveness of the small diameter sewer capacity projects (many of which are completed or underway) and to validate and confirm the scope of projects needed to address the large-diameter sewers or trunk sewers. Thus, in addition to the many tools listed above, the County has verified its conclusions with respect to system rehabilitation.

SRWA Questions: 1) What is the timeline for completion of the dynamic model? 2) How was the 5-7-year timeline established for the 103 sites on the Priority Fix List determined without the benefit of the dynamic model?

DeKalb County Response: It is somewhat misleading to suggest that a model is ever "complete." Good modeling is iterative and improves over time. In this case, the County developed the first of its seven dynamic models in August 2019. The model has been peer reviewed, and the County has coordinated with EPA/EPD in its development. As explained above, the County's dynamic model has been used to verify conclusions reached using the many other tools available, including the approved static model.

Prior to the lodging of the Modification, the County submitted seven detailed reports describing the dynamic model and how it will be used (one report for each of the County's seven sewer basins). EPA/EPD reviewed these reports and provided comments to the County. On April 2, 2021, the County submitted final certified reports. Once approved, and assuming the Modification is entered,

the County will then use the dynamic model for purposes of certifying new capacity.⁵⁸

With respect to the second question, the proposed timeline for the 103 PFL sites is based on expert assessment of the specific projects required to resolve the issues at each PFL location and numerous considerations including, among others, survey, engineer/design, procurement, easement acquisition, federal, state, and local permitting, geotechnical assessments, material delivery, extent of I/I,⁵⁹ construction, and logistics. In other words, the timeline is based on the estimated time required to complete the work needed to fix the system issues at these locations. For example, several PFL locations are associated with capacity limited trunk sewers, which can only be addressed by implementing extraordinarily complex construction projects. Nine (9) of the PFL sites are the result of capacity issues along the Shoal Creek Trunk Sewer. Preliminary evaluations indicate that approximately 11 miles of this trunk sewer will require capacity improvements. This portion of the trunk sewer includes multiple stream crossings, lies within state-protected stream buffers, crosses four (4) highways, two (2) interstates, and impacts over 270 properties and thus will likely require significant time to acquire permits and easements. Additionally, the capacity solution will likely include a large peak flow storage facility which will require site selection and acquisition of property. The County evaluated these complexities and used its best professional judgment to determine how long each project will take.

(2) MCD Reference: The dynamic model shall be comprised of a "sub model" for each of seven (7) hydraulically separate areas within the WCTS" (P. 10, Sec 28). "Upon written approval by EPA/EPD of each sub-model report, the County shall authorize pursuant to the CAP new sewer service connections or increases in flow from existing sewer service connections" (P. 14, Sec (c)).

<u>SRWA Questions</u>: 1) How does the sub-model fit hydraulically into the dynamic model framework? 2) How was the County's Capacity Assurance Program (CAP) completed without information provided by the dynamic hydraulic model?

⁵⁹ See supra note 28.

^{See Consent Decree Modification, Appendix D (CAP) at Sec. 1.4 [Dkt. 61-2].}

DeKalb County Response: There is a master dynamic model template (or framework). Each sub-model uses this template but has inputs based on the specific characteristics of each of the County's seven hydraulically independent drainage areas within the system. These seven areas are:

- Snapfinger Basin encompasses all flows to the Snapfinger AWTF
- Pole Bridge Basin encompasses all flows to the Pole Bridge AWTF
- South Fork Peachtree Creek Basin encompasses all flows to the City of Atlanta's South Fork Peachtree Creek Trunk/Relief Sewer
- North Fork Peachtree Creek Basin encompasses all flows to the City of Atlanta's North Fork Peachtree Creek Trunk/Relief Sewer
- *Intrenchment Creek Basin* encompasses all flows to the City of Atlanta's Sugar Creek Trunk Sewer
- *Nancy Creek Basin* encompasses all flows to the City of Atlanta's Nancy Creek Basin
- *Miscellaneous Basin* encompasses all flows to Fulton County and Gwinnett County.

Each sub-model is separate from the other sub-models and reflects basin characteristics (*e.g.*, area, miles and size of pipe, number and location of lift stations (*i.e.*, pumps), and number and characteristics of sub-catchments). While the County could have developed one model with seven areas of independent discharge points, the sub-model approach is preferred. For example, it allows the County to allocate modeling resources at the basin level and have teams working simultaneously on multiple basins at one time. Additionally, the model run times are much shorter with seven separate models.

The CAP describes how the County will use the dynamic model to assess and certify capacity for new connections. It was developed based on industry standards and is, to a large degree, modeled on other capacity assurance programs that have been approved in other federal consent decrees for other municipalities in the Southeast. A dynamic model is not needed to develop a CAP, but, in this case, the County's proposed CAP contemplates the use of the dynamic model once it is approved. (3) MCD Reference: b) "The dynamic model "shall be capable of predicting the volume of wastewater in force mains and major gravity sewer lines, including predicting the peak flows during wet weather and dry weather conditions". (c) The dynamic model shall be capable of assisting in determining the likelihood and location of capacity-related SSOs from the County's WCTS. (P. 10, Sec. (b), (c).

<u>SRWA Questions</u>: 1) What is the definition of "assisting"? 2) If the dynamic model is capable of "predicting", why is it only being used to "assist in determining the likelihood and location of capacity-related SSOs from the County's WCTS"?

DeKalb County Response: In this context, "assisting" has its plain meaning – to help or aid in determining the likelihood and location of capacityrelated SSOs. The model must be capable of forecasting expected flows during certain conditions. This provides an important, but nonexclusive, tool for predicting capacity-related SSOs. Indeed, the County will use the many tools at its disposal (see response above) to forecast and prevent SSOs. The model was never intended to be the only tool the County can use. Finally, the language to which SRWA objects – "assisting," "predicting," and "assist in determining the likelihood and location of capacity-related SSOs from the County's WCTS" – are all included verbatim in the Consent Decree entered by the Court in 2011.⁶⁰

(4) MCD Reference: "The dynamic model shall be capable of predicting the flow capacity of each lift station (for major lift stations, the County may elect to perform manual calculations in lieu of using the model to evaluate lift station capacity), including predicting the peak flows during wet weather and dry weather conditions." (P. 11, Sec. (e)).

<u>SRWA Question</u>: Under what circumstances and/or situation would the County choose to "use manual calculations in lieu of using the model capable of predicting flows to evaluate lift station capacity"?

⁶⁰ See Consent Decree at \P 28(c)-(e) [Dkt. 39].

DeKalb County Response: This comment and other questions rest on a faulty premise that a dynamic model (or really, any model) is capable of making determinations without interpretation by professional engineers and modelers. This is an incorrect assumption. The model is a tool used by the County and its experts. As the famous British statistician, George E. P. Box, put it plainly, "all models are wrong, but some are useful." Both the County's static model and its dynamic model are useful. But they are imperfect tools. The County's system is extraordinarily complex, with thousands of miles of pipes, dozens of lift stations, and hundreds of thousands of connections. If the County's tools suggest that it needs a new lift station, the County will rely on its expertise and professional engineers, and not exclusively on a model, before investing significant resources on a new lift station.

(5) MCD Reference: "The dynamic model will assist the County in assuring the availability of WCTS and WWTF capacity prior to permitting flows from new sewer service connections or increases in flow from existing sewer service connections." (P. 11, Sec (f)).

SRWA Comment/Question: The numerous times the dynamic model is described as an assist tool raises questions and concerns about the extent to which engineering science is being upended/usurped and replaced with human judgement. 1) Under what circumstance and/or situations would the judgement of the County employed professional engineer supersede data provided by the dynamic model?

DeKalb County Response: See above responses. Additionally, this question rests on the erroneous premise that the model is perfect. That is not the case. In some instances, there will be new or better information that the model did not take into account. In those cases, the model will be overruled and updated and/or re-calibrated.

(6) MCD Reference: "The Capacity Assurance Program (CAP) will allow the County to identify each sewershed or part of a sewershed with insufficient capacity under either peak wet weather, or average conditions, or both". (P.14, Sec. (b)).

SRWA Question: What is the definition of "average conditions"?

DeKalb County Response: Average conditions represent average daily flow patterns not impacted by wet weather.

(7) **MCD Reference:** "For purposes of this Paragraph only, the term "One (1) Hour Peak Flow" shall mean the greatest flow in a sewer averaged over a sixty (60) minute period at a specific location expected to occur as a result of a representative two (2) year twenty-four (24) hour storm event" (P. 17, Sec. 4).

SRWA Questions: 1) How is the "specific location" chosen? 2) Why would someone expect that the modeled storm event would occur at this location? 3) Capacity in the County's sewer system is impacted by rainfall induced infiltration and inflow. Why wasn't the ratio of maximum flow to average flow as defined in the DeKalb County, Priority Areas Sewer Assessment and Rehabilitation Program Report, July 2015, restated below, used?

Estimated Rainfall Dependent Infiltration/Inflow ("RDI/I") Into the System: RDI/I is defined as the portion of I/I that is directly influenced by the intensity and duration of a storm event. Two indicators of RDI/I include the peaking factor and the "R-Value". The peaking factor is the ratio of the maximum flow to the average flow for a selected period of time (hour or day). The "R-Value" is defined as the fraction (generally expressed as a percentage) of rainfall entering a sewer system as RDI/I.

DeKalb County Response: The term "specific location" refers to each pipe within the WCTS included in the dynamic model.

In the PASARP Report, RDI/I was calculated by hand using flow meter and rain gauge data to determine the peaking factor and R-values. In the dynamic model, RDI/I is accounted for through the model's calibration to historical wet weather flow meter data.

(8) MCD Reference: "For purposes of this Paragraph only, the term "Surcharge Condition" shall mean the condition that exists when the supply of wastewater resulting from the One (1) Hour Peak Flow is greater than the
capacity of the pipes to carry it or the surface of the wastewater rises to an elevation greater than the top of the pipe, and the sewer is under pressure or head, rather than at atmospheric pressure. However, if the County has identified sewer line segments which have been specifically designed and constructed to operate under surcharge conditions (e.g., segments with welded or bolted joints) and has identified the level of surcharge for those segments, the identified level of surcharge will be used." "Notwithstanding the immediately preceding sentence, any rise in elevation above the top of the pipe shall be considered a surcharge condition if the manhole has experienced a capacity-related SSO since December 20, 2017." (P. 17, Sec. 5)

SRWA Questions: 1) What was the rationale for the referenced "welded or bolted joints" and where has this design and fix been implemented? 2) What is the level of surcharge for these segments? 3) How was the "identified level of surcharge" determined? 4) What is basis for excluding capacity related SSO since December 20, 2017? See also Comment in response to MCD Reference (11) below.

DeKalb County Response: "Surcharge" describes a *modeled* condition above a system-specific standard, where the risk of an SSO or damage to the system may unreasonably increase. In part, the appropriate "surcharge" level is based on the pressure that the system can take – higher flows increase pressure on system infrastructure and can cause leaking or damage. Welded or bolted joints are common sewer system improvements, which allow a system to sustain more pressure, and are used in the Modification as an example of a situation where an alternative surcharge level would be appropriate (*i.e.*, where the Modification's default surcharge level is unnecessarily over-protective). The alternative level of surcharge for such segments depends on how much pressure that specific system infrastructure can safely take without risking damage or leaks and is determined by looking at the pressure rating of pipe materials and joints, field pressure testing results, and other information about the surrounding infrastructure within the system.

The Modification establishes a default surcharge level as the top of the sewer pipes. It could have used a higher level (*e.g.*, it could have defined "surcharge" as no more than three feet above the pipe (but within the manhole well)). Instead, the Modification provides a greater margin of safety by requiring modeled conditions within the pipe before the County may certify adequate capacity. All sewer systems are different and other municipalities and authorities have used different standards to define "surcharge." In fact, a majority of consent

decrees in the Southeast have a more permissive surcharge definition than the "top of pipe" standard established for the County's system in the Modification. Examples of these surcharge definitions are included in the below chart. The majority allow surcharging two feet above top-of-pipe.

	Utility Name	CD Lodging	CD Deadline	Surcharge Definition
1.	City of Lexington, KY ("LFUCG")	1/3/2011	2026	Defines surcharge condition as "the condition that exists when the supply of wastewater resulting from the One-Hour Peak Flow is greater than the capacity of the pipes to carry it and the surface of the wastewater in manholes rises to an elevation greater than twenty-four (24) inches above the top of the pipe or within three (3) feet of the rim of the manhole , and the sewer is under pressure or head, rather than at atmospheric pressure, unless LFUCG has, pursuant to Paragraph 16.B.(i)(e), above, identified that pipe segment and manhole is designed to operate in that condition[.]" United States v. Lexington- Fayette Urban Cnty. Gov't, No. 5:06-cv-386, Consent Decree at Sec. VI.16.B.(ii)(d) (C.D. Ky. Jan. 03, 2011) (emphasis added).
2.	City of Chattanooga, TN	04/24/2013	2025	Defines surcharge condition as "the condition that exists when the supply of wastewater resulting from the one (1) hour peak flow is greater than the capacity of the pipes to carry it and the surface of the wastewater in manholes rises to an elevation greater than twenty-four (24) inches above the top of the pipe or within thirty-six (36) inches of the rim of the manhole , and the sewer is under pressure or head, rather than at atmospheric pressure, unless Chattanooga has, pursuant to Paragraph 20.(h).i.(F), above, identified that pipe segment and manhole as designed to operate in that condition, in which case the identified level of surcharge will be used." <i>United States v.</i> <i>City of Chattanooga</i> , No. 1:10-cv-281, Consent Decree at Sec VI.20.(h)ii.(D) (E.D. Tenn. Apr. 24, 2012) (emphasis added).
3.	The City of Knoxville, TN ("KUB")	2/11/2005	2012	Defines surcharge condition as "the condition that exists when the supply of wastewater resulting from the one (1) hour peak flow is greater than the capacity of the pipes to carry it and the surface of the wastewater in manholes rises to an elevation greater than twenty-four (24) inches above the top of the pipe or within three (3) feet of the rim of the manhole , and the sewer is under pressure or head, rather than at atmospheric pressure, unless KUB has, pursuant to Section VII. 1.(a).(iii).(A).(6), above identified that pipe segment and manhole as designed to operate in that condition, in which case the identified level of surcharge will be used." United States v. <i>Knoxville Utilities Bd.</i> , No. 3:03-cv-497, Consent Decree at Sec. VII.D.1.(iii)(B)(4) (N.D. Tenn. Feb. 11, 2005) (emphasis added).

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	Utility Name	CD Lodging	CD Deadline	Surcharge Definition
4.	Atlanta, GA	06/06/2013	2028	Provides that surcharge is below top of manhole (i.e., where no overflows occur) and appears to be the most permissive. It states that "(i) each Major Gravity Sewer shall be capable of managing projected peak flows such that Sewage overflows do not occur [and] (ii) that each major Gravity Sewer shall be capable of carrying projected peak flow such that Sewage overflows do not occur." <i>United States vs. City of Atlanta</i> , Second Amendment to First Amended Consent Decree at Revision to Sec. VIII.C.5.b.(i) and VIII.C.5.b.(ii) (N.D. Ga. May 31, 2012) (emphasis added).
5.	City of Columbia, SC	5/21/2014	2020	For two years from the approval of the CAP, surcharge condition is defined as "the condition that exists when the supply of wastewater resulting from the one (1) hour peak flow is greater than the capacity of the pipes to carry it and the surface of the wastewater rises to an elevation within two (2) feet of the rim of any manhole , and the gravity sewer pipe is under pressure or head, rather than at atmospheric pressure." <i>United States v. City of Columbia</i> , No. 3:13-2429-TLW, Consent Decree at Sec. V.12.e.(i)(E)(1) (D.S.C. Sept. 9, 2013) (emphasis added).
				After two years from the date of EPA's approval of the CAP, surcharge condition will be defined as "when the wastewater resulting from the one (1) hour peak flow is greater than the capacity of the pipes to carry it and the surface of the wastewater in manholes rises to an elevation greater than twenty-four (24) inches above the top of the pipe or within two (2) feet of the rim of the manhole, and the gravity sewer pipe is under pressure or head, rather than at atmospheric pressure, unless Columbia has, pursuant to Paragraph 12.e.(ii)(A), identified that pipe segment and manhole as designed to operate in that condition, in which case the identified level of surcharge for that pipe segment and manhole will be used to define a Surcharge Condition. <i>Id.</i> at Sec.V.12.e.(i)(E)(2) (emphasis added).

	Utility Name	CD Lodging	CD Deadline	Surcharge Definition
6.	City of Jackson, MS	12/3/2012	2029	Provides that "[e]xcept for the West Bank Interceptor as set forth below, the term "Surcharge Condition" shall mean the condition that exists when the supply of wastewater resulting from the one (1) hour peak flow is greater than the capacity of the pipes to carry it and the surface of the wastewater in manholes rises to an elevation greater than twenty-four (24) inches above the top of the pipe or within three (3) feet of the rim of the manhole, and the sewer is under pressure or head, rather than at atmospheric pressure, unless the City has, pursuant to Paragraph 33.(~ above, identified that pipe segment and manhole as designed to operate in that condition, in which case the identified level of surcharge will be used[.]" United States v. Jackson, No. 3:12-cv-790 TSL-MTP, Consent Decree at Sec. VI.D.33.(g)(iv) (S.D. Ms. Nov. 11, 2012) (emphasis added).
				Also, provides that "[f]or the West Bank Interceptor, the term "Surcharge Condition" shall mean the condition that exists when the supply of wastewater resulting from the one (1) hour peak flow is greater than the capacity of the Interceptor to carry it and the surface of the wastewater rises to an elevation within three (3) feet of the rim of any manhole." <i>Id.</i> (emphasis added).
7.	Winchester Municipal Utilities, Kentucky	4/10/2007	2025	Defines surcharge conditions as "the condition that exists when the supply of wastewater resulting from the one (1) hour peak flow is greater than the capacity of the pipes to carry it and the surface of the wastewater in manholes rises to an elevation greater than twenty-four (24) inches above the top of the pipe or within three (3) feet of the rim of the manhole , and the sewer is under pressure or head, rather than at atmospheric pressure." United States v. Winchester Mun. Utils., No. 5:06- cv-00102-KSF, Consent Decree at Sec. VI.B.28.e.(ii)(D) (Apr. 10, 2007) (emphasis added).
8.	Louisville and Jefferson County, Kentucky	4/25/2005	2024	Defines a wet weather surcharge condition as a "a water surface level within the sewer that is less than two (2) feet from the manhole rim elevation. If the sewer system is in an area of significant backup complaints then a surcharge condition is considered to be a water surface level within five (5) feet of the manhole rim." <i>Commonwealth of Ky v.</i> <i>Louisville and Jefferson Cnty. Metro. Sewer Dist.</i> , No. 3:08-cv- 00608-CRS, Amended Consent Decree, Exhibit B at 16 (Nov. 20, 2008) (emphasis added).

Based on its assessments, the County believes its system can safely handle surcharge levels much higher than the default surcharge level established by the Modification. Indeed, the County believes that surcharging several feet above top of pipe is safe and protective of the system. The County's position is based on a number of reasons including its finding that its system experiences external pressure (*i.e.*, from the outside in due to depth of sewer and loads above it), as well as on the County's pressure testing and assessment data, which shows most structural defects in the WCTS are not attributable to surcharging (*i.e.*, excessive pressure). As a result, infrequent and short periods of increased surcharge does not strain the system. EPA/EPD disagreed, and the County was willing to compromise from its technical position for purposes of reaching an agreement and avoiding litigation. Similarly, the County does not believe that the December 20, 2017 limitation on the use of alternative surcharge levels is warranted but was ultimately willing to agree to that limitation for purposes of settlement.

(9) MCD Reference: "Notwithstanding the immediately preceding sentence, (immediately above), any rise in elevation above the top of the pipe shall be considered a Surcharge Condition if the manhole has experienced a wet weather SSO since December 20, 2017 (excluding those SSOs caused by severe natural conditions such as hurricanes, tornados, widespread flooding, earthquakes, and other similar conditions ("Severe Natural Conditions"), unless the County can certify that the cause of the SSO has been corrected through improvements to the WCTS". (P. 17, Sec. 5).

SRWA Comment/Questions: The "severe natural conditions" exclusion is worded too broadly. In the Interim Sanitary Sewer Capacity Evaluation Program (Section 3.2) dated February 2018, DeKalb County states "SSOs attributed to large wet weather events with rainfall intensities exceeding a 2-year recurrence interval may be excluded from the list." In response, EPA/EPD state, "This is not the intent of the CD. Choosing a 2-year recurrence storm as a design basis does not precludes SSO caused by larger storms." 1) Does the "severe natural conditions" exclusion coincide with the County's statement and describe all wet weather events exceeding a 2-year recurrence interval? 2) What level of protection does DeKalb County intend to provide in the WCTS after implementation of the CD? 3) What storm event will produce SSOs in the future after consent decree closure? 4) What is the definition of "widespread flooding" and "other similar conditions"?

DeKalb County Response: The Modification defines "severe natural conditions" by providing a nonexclusive list of examples – "hurricanes, tornados,

widespread flooding, earthquakes, and other similar conditions."⁶¹ The "severe natural condition" concept is used throughout the Modification to establish a mechanism for the County to seek relief from certain automatic consequences that stem from a wet weather or capacity-related SSO. For example, the Modification prohibits the County from using the "New Connection Conditions" to certify new sewer connections and accommodate economic growth, if there has been a downstream, capacity-related SSO within the past year. If the only such capacity-related SSO was caused, for example, by Hurricane Sally, where the County experienced record rainfalls, then the County will not be precluded from certifying capacity under the New Connection Conditions, because the cause of that SSO is beyond what the County is expected to control for. EPA/EPD have oversight and if they disagree with the County's determination that an event constitutes a "severe natural condition," then the Modification provides a mechanism for resolving that dispute.⁶²

The County has not worked through all of the potential hypothetical situations where it might be appropriate to claim that a severe natural condition insulates it from some consequence under the Modification and doing so at this time would be unproductive. As real events occur, the County will assess the circumstances of those events and make a determination in the first instance about whether it constitutes severe natural conditions or other circumstances beyond the County's control (*e.g.*, vandalism). EPA/EPD have oversight of the County's determination and there is a mechanism for resolving any disputes. Generally speaking, however, the County expects that an event would need to exceed, perhaps significantly, the 2-year, 24-hour design storm referenced in the SRWA comment and questions, in order to constitute excusable "severe natural conditions."

The level of protection the County intends to provide after implementation of the Consent Decree is not relevant to the question of whether the Modification is in the public interest and reasonable. The County's anticipated level of protection after the Consent Decree will be protective of the environment and consistent with any applicable legal requirements. At this point, the County cannot provide a more

⁶¹ Consent Decree Modification at \P 4 [Dkt. 72-2] (removing and replacing \P 29(d)(5) in the Consent Decree).

See id. at ¶ 8(adding ¶ 35(j) to the Consent Decree); Consent Decree at ¶¶
 78-85 [Dkt. 39].

specific response without speculating. However, the County's current rehabilitation plans account for the definition of surcharge provided in the Modification, as well as the County's growth projections through 2050, which will be well after termination of the Consent Decree.

(10) MCD Reference: The use of the static hydraulic model will continue until a dynamic model for each one of the seven (7) hydraulically separate areas within the WCTS is completed. (P. 18, Sec. (e)).

SRWA Comments/Questions: Aside from the three basin models not being dynamic models (as stipulated in the CD), the steady-state modeling capacity criteria used in these models is grossly deficient. Sewage spills normally occur during peak flows with above average storm events. The steady-state models developed for DeKalb County used a "maximum monthly average daily flow (MMADF)" criteria which is not only confusing, but is completely deficient for assessing spill problems in a sanitary sewer system under intense storm conditions. The County also appears to have invented criteria, such as allowable surcharge into manholes (within 24" on the top of manhole), for assessing whether capacity in a pipe is acceptable. All of this resulted in two more years wasted by avoiding the type of modeling needed to assess spill problems in the County. (Randall Grachek, P.E., Newfields. Mr. Grachek is a professional engineer with experience designing wastewater treatment plants and evaluating CSO / SSO systems).

1) How will different requirements and outcomes associated with development of the dynamic model be integrated into projects developed using the steady-state or static model? 2) How will capacity decisions and related connections and sewer system fixes made using the static model be reconciled with requirements of the dynamic model?

DeKalb County Response: The County disagrees and believes that this comment stems from a misunderstanding of the modeling, the County's system, and the County's protocols for certifying new connections.

It is common for wastewater collection systems to undergo short periods of surcharging beyond the top of the pipes that are still contained within their manholes during peak flows from wet weather events. As discussed above, the acceptable level of surcharging is tied to the amount of pressure a system can handle, and the County, like many wastewater utilities, believes that its system can handle pressures created with surcharging several feet above the pipe. The County's system is, generally speaking, under negative pressure, suggesting that surcharging at any level below the manholes does not jeopardize the system's integrity. Nonetheless, the County has compromised in the Modification and accepted lower surcharging levels.

While the second question is not entirely clear, the County notes that its static and dynamic models generally predict capacity constraints in the same locations. Additionally, the County has used its dynamic model to evaluate past, ongoing, and future projects that were planned using the static model (along with other tools). The County is confident in its project selection and finds that the dynamic model validates the results from the static model.

Finally, in many ways the County's static model is more conservative than its dynamic model. And based on the many safeguards included along with the maximum monthly average daily flow assessments, the County believes that its current (pre-entry of the Modification) new connection certification procedures are sound and protective of the system and the environment. Nonetheless, upon entry of the Modification and approval of the dynamic model in writing by EPA/EPD, the County will use the dynamic model and the CAP for certifying new connections.⁶³ Thus, the Modification will eliminate the concepts and processes within the static model and the current new connection certifications that Mr. Grachek believes are objectionable.

(11) MCD Reference: A condition for hooking a new connection to the sewer system is "The dynamic model does not predict that, after adding the new sewer service connections, and/or increases in flow from the existing sewer service connections, to all existing and authorized sewer connections, the wastewater in any manhole from the one (1) hour peak flow resulting from a representative two (2) year twenty-four (24) hour storm event will rise to an elevation within two (2) feet of ground surface at any location in the WCTS through which the proposed additional flows from the new or existing connection would pass. However, for manholes within 350 feet of the entrance to or exit from aerial crossings (at locations including creeks, dry beds, stormwater ditches and conveyances, and

^{See Consent Decree Modification, Appendix D (CAP) at Sec. 1.4 [Dkt. 612].}

intermittent and ephemeral streams) with less than two (2) feet of ground cover over their connecting pipes, the wastewater predicted as described above shall not rise to an elevation within two (2) feet of the manhole rim. (P. 18, Sec. (2)).

SRWA Comments/Questions: DeKalb County uses a modeled capacity acceptance criteria that during a 2-year, 24 hour storm event, if a manhole ONLY surcharges to within 24" of the top of the manhole, then the pipe capacity is confirmed as acceptable. For this to happen, the horizontal pipe conveying the wastewater below the manhole would have to be flowing full for a considerable distance upstream and downstream of the manhole. This "full flow" is unacceptable because when a pipe flows full, it becomes a pressure line, and that pressure needs to be relieved somewhere, resulting in wastewater being forced up and out of the manhole. Once the conveyance pipe is full, all of the manholes that have top of elevation below the upstream wastewater elevation in the conveyance pipe will fill up and eventually spill. Sealing the manhole covers, a practice used by the County, only exacerbates the problem as it applies a large amount of pressure on the entire system. (Randall Grachek, P.E., Newfields. Mr. Grachek is a professional engineer with experience designing wastewater treatment plants and evaluating CSO / SSO systems).

The current dynamic models for the small subset of sewer areas in DeKalb County only includes a 2-year, 24 hour storm event. Even at this relatively low magnitude of storm, the system still produces significant sewage spills. Modeling should be performed on several more intense storms, up to a 20-year, 6-hour event. See also Comment in response to MCD Reference (7) below. 1) Why is EPA/EPD supporting a dynamic model scenario where the peak design flow rates under the condition of a relatively small storm event consumes 100% of the pipe capacity resulting in a surcharge condition? 2) Why is EPA not requiring modeling of storms of several different durations and intensities to determine the effects of these events on sewage spills and to provide engineering data regarding possible corrective actions?

DeKalb County Response: The County believes that these comments and questions stem from a failure to understand how the modeling and capacity certifications work now and how they will work under the Modification. The surcharge criteria apply to <u>all manholes</u>. Thus, if the County models the circumstances Mr. Grachek describes above (where one or more manholes cause another manhole to exceed the applicable surcharge level), the County would conclude that there is no available capacity and would not authorize new

connections, absent available in-lieu credits under the CAP. Said another way, if one single downstream manhole is modeled to be in a surcharge condition, then there is no remaining capacity to convey additional flow from new connections upstream of that location.

At this time, the County does not intend to seal manholes. In fact, while a sealed manhole may prevent a sewage overflow, it would not prevent surcharging within that manhole from exceeding the surcharge criteria.

The County acknowledges that its current system produces spills and overflows during a 2-year 24-hour event. However, the planned system improvements are designed to fix that issue. The County's planning criteria is consistent with industry standards and strikes a reasonable balance of complex competing public interest factors.

(12) MCD Reference: The Priority Areas Sewer Assessment and Rehabilitation Program (PASARP) shall, "Provide for the identification, delineation, assessment and rehabilitation of all Initial and Additional Priority Areas no later than December 20, 2027". P. 21, Sec. (i)

<u>SRWA Comments/Questions</u>: The dynamic model has not been completed. Pipe review, design, and rehabilitation assessments have not been completed. Milestones are denoted in hundreds to thousands of linear feet spread out over two years. Additionally, the County has the discretion to re-prioritize work between years. How can PASARP decisions be made to complete rehabilitation by December 20, 2027, without first having the information needed to design and build a specific fix?

DeKalb County Response: As stated above, the dynamic model has been completed and peer reviewed. It will be used by the County for new connection capacity certifications once the Modification is entered and the model is approved by EPA/EPD. Further, the County's assessment of the necessary rehabilitation in the PASARP was completed using a variety of assessment tools, including smoke testing, manhole condition assessment, acoustic inspection, and CCTV to identify structural issues. These tools were also used in connection with flow monitoring data and the static model to identify all capacity limitations in the system. The dynamic model has validated the County's analysis and rehabilitation plans.

To be clear, the County is working to complete the needed improvements as soon as possible. The deadlines and minimum linear footage interim milestones in the Modification, including the December 20, 2027 deadline for the PASARP, are based on actual projects in the planning process. While these deadlines are aggressive, the County believes they are attainable and is committed to these schedules.

Finally, the County believes it has the information it needs to commit to these timelines. The deadlines for completion of rehabilitation and capacity improvements stipulated in other Consent Decrees are based on a similar level of system information and planning, if not less. The suggestion that the County must have extensive construction designs and building specifications for all projects prior to committing to a timeline is unrealistic. Such a requirement would needlessly delay rehabilitation of the County's system.

(13) MCD Reference: ". . . . Within two (2) years of the date of entry of this modification, the County shall adequately rehabilitate, relieve, fix, or otherwise address fifty percent (50%) of the locations in Appendix F " P. 23, Sec. (j)

SRWA Comments/Questions: In the Interim Sanitary Sewer Capacity Evaluation Program (Section 3.2), February 2018, DeKalb County states "SSOs shall also be excluded from the list when it can be concluded that subsequent remedial actions have eliminated the potential for SSO reoccurrence." "Therefore,

- Do not include SSOs attributed to blockages caused by FOG, debris, roots, etc. which have been subsequently remedied by removal of the blockage through cleaning or other measures;
- Do not include SSOs attributed to operational issues at lift stations or wastewater treatment facilities which have been subsequently remedied by the implementation of new procedures or other operational improvements;
- Do not include SSOs attributed to capacity issues which have been subsequently remedied by the completion of capacity improvements."

In response, EPA/EPD states "This continues to be a major weak point. The subsequent remedy concept in this section provides an easy mechanism (excuse) to remove SSOs from consideration without any proof that such remedies were indeed

effective. For example, if you have repetitive spills at one location due to FOG, debris etc., then removal of the blockage likely does not solve the problem. These SSO categories should not be removed without real and repeated demonstration of capacity improvement." "The underlining issue here is how the SSOs removed from the list will be determined. SSOs could be removed from the list by attributing multiple SSOs to unrelated capacity limitation fixes." Interim Sanitary Sewer Capacity Evaluation Program (Section 3.2), February 2018. Additionally, these same weaknesses were identified by EPA/EPD in DeKalb County's Interim Sanitary Sewer Capacity Evaluation Program, December 2017, with the following comments: "This is a major weak point. These exclusions raise serious concerns for EPA/EPD. All SSOs are prohibited under the CWA. These exclusions are not consistent with the CD."

1) What is the definition of "adequately" relative to rehabilitate, relieve, fix" as stated. 2) What is the definition of "or otherwise address" as stated? 3) What is the test for certifying that the 103 Priority Fix List sites are "adequately" repaired relative to the elimination of SSOs?

DeKalb County Response: The Modification provides an objective test to determine when a PFL location is adequately fixed. Specifically, the County must perform the required work such "that no future SSOs are predicted to occur at any such locations as a result of a representative two (2) year twenty-four (24) hour storm event."⁶⁴ The County will use the dynamic model to confirm that no future SSOs are predicted using the stated criteria.

(14) MCD Reference: "Any location in the County's WCTS shall immediately be added to the Priority Fix List if it experiences in any twelve (12) month period either two (2) or more SSOs caused by a lack of Adequate Collection Capacity or Adequate Transmission Capacity or two (2) or more SSOs caused by non-capacity reasons within a 500-foot radius area ("Repeat SSO Location"). (p. 24, Sec. (j)).

Comment/Question: Each and every spill is a violation of the Clean Water Act. 1) What is the basis for two (2) or more spills as the trigger rather than one (1) spill. The continuation of spills from "adequately fixed" sites speak to the

⁶⁴ Consent Decree Modification at \P 8 [Dkt. 72-2] (adding \P 35(j) to the Consent Decree).

integrity of specific fixes that have been implemented and whether the spills is truly capacity related or due to another cause as described in #13 above. 2) Is the referenced timeframe a rolling twelve (12) month period?

DeKalb County Response: The PFL program prioritizes repeat SSO locations and provides more rigorous requirements for tracking these locations along with additional agency oversight. It includes specific deadlines for any repeat SSO location. From the County's perspective, the PFL program is a novel and onerous requirement, not seen in other federal consent decrees.

The County investigates and addresses every SSO – regardless of whether it is a repeat location. The Modification punishes the County for each SSO, through stipulated penalties, and, for capacity-related SSOs, by requiring corrective action prior to certifying new connections upstream.

The twelve (12) month evaluation period for determining whether to add a new site to the PFL begins at the occurrence of the first qualifying SSO and is therefore a "rolling" twelve (12) month period.

B. DeKalb County Responses to SRWA Comments on Capacity Assurance Program (CAP)

(1) **Reference: 3.4 Minor Sewer Connections:** "Minor sewer connections defined as connections in which the average daily flow is not to exceed 2,500 gpd." "The County shall evaluate proposed new minor connections on a monthly basis to certify adequate capacity" (P. 11)

SRWA Comments/Questions: The cumulative impact of minor sewer connections could have major impact on sewer system capacity. For example, the County proposes to use a modeled capacity acceptance criterion that during a 2-year, 24-hour storm event a manhole can surcharge to within 24" of the top of the manhole where flow that equals 100% of capacity is acceptable (See #11 above). This situation will create a logistical nightmare and will be impossible to effectively manage. 1) Are "minor sewer connections and related flows accounted for in dynamic model? 2) At what point in the month to month evaluation process are new minor connections made? 3) Exactly what is the meaning of "adjust capacity evaluations accordingly"? 4) What happens if it is determined there is no capacity for minor sewer connections that have already been made? This issue was also

raised by EPA/EPD in email correspondence dated October 18, 2019, Subject: Explanation for DeKalb's departure from items in EPA/EPD CAP Outline, and again in a face-to-face meeting on November 5, 2019.⁶⁵

DeKalb County Response: The County disagrees. As an initial matter, minor sewer connections are primarily single-family homes, which even when taken together, will have a marginal impact on overall flows. For context, in 2020, the County received an average of 17 minor sewer connection requests each month, and the average request was for 460 gallons per day. In 2020, the typical combined flow in the County's system was 72,000,000 gallons per day.

The administration and implementation of the minor sewer connections provision in the County's CAP will be manageable. Indeed, similar provisions are common in capacity assurance programs associated with other EPA Region 4 consent decrees.⁶⁶ Through common professional networks and associations, the County and its technical advisors have access to professionals at other wastewater utilities and does not believe any are having difficulty implementing these relatively common minor sewer connection provisions. The County manages far more complex issues and systems every day.

Indeed, the minor sewer connections provision provides administrative efficiency and convenience, while being protective of the system and the environment. It allows the County to allocate a portion of available sewer capacity to anticipated minor sewer connections for the next month, which avoids having to evaluate each minor sewer connection individually upon receipt. The County can certify minor sewer connections (*e.g.*, single-family homes) during that month, until the point where the total peak flow capacity of the minor sewer connection requests received reaches the allocated capacity.

The County will validate its sewer connection approvals, and, in the unlikely event that the total peak flow from minor connection requests approved during the

⁶⁵ The County does not have information about the source of SRWA's information regarding "EPA" positions taken in its negotiations and does not by responding acknowledge or endorse the veracity of SRWA's assertions or the fact that they are "EPA" positions.

⁶⁶ See, e.g., United States v. Columbia, 3:13-cv-02490TLW (D.S.C. 2013) (allowing a quarterly capacity analysis for minor sewer service connections).

prior month exceeds the allocated/available capacity, the County will deduct inlieu credits from its capacity banking credit system to balance available and approved capacity. This is a manageable process (not a logistical nightmare), and the County is deeply motivated to get it right because it faces stipulated penalties of \$10,000 per minor connection and \$50,000 per major connection (>2,500 gallons per day) authorized in violation of the Modification and CAP.⁶⁷

Finally, all proposed and active sewer connections, including minor sewer connections, are accounted for in the dynamic model. All proposed sewer connections, including minor sewer connections, can connect and contribute flow at any time once those connections have met the County's capacity review requirements (in the CAP) and have been approved by the County.

(2) Reference: 3.5 Capacity Approval In Lieu of Certification Process. The County may authorize new sewer service connections or additional flow from an existing connection even if capacity cannot be certified and issuance of certification cannot be made. This exception is based on a number of factors including certification by a professional engineer, substantial compliance with the MCD, and use of credit banking. (P. 11).

SRWA Comments/Questions: This entire approval process has significant conflict of interest implications arising from the professional engineer(s) having approval authority over this entire process also being employees of the County, directly or through contract. 1) In order to address conflict of interest and ensure accountability, oversight and final approval of this process must be assigned to an objective third-party (special master) with no ties or allegiance to the County. 2) What is the definition of "substantial compliance"? Also see 4.1.2 System Flows.

DeKalb County Response: The County firmly disagrees with this comment and the suggestion that the County would not be objective in its evaluation of new connection requests. The County wants economic development. At the same time, it wants to protect its system, its citizens, and the environment, as well. To suggest that the County cannot be objective in its evaluation of whether the capacity requested is more or less than the capacity available is

⁶⁷ See Consent Decree Modification at \P 14 [Dkt. 72-2] (adding \P 65(i) to the Consent Decree).

unfounded. The test for determining available capacity under the Modification and CAP is an <u>objective</u> test, and the County will apply it objectively.

Indeed, the County has objectively applied the criteria of its existing protocols for new connections. And, in 2018, the EPA informally audited this process and did not identify circumstances where new connections had been approved without meeting *all* capacity certification requirements. As of August 1, 2021, there were 480 outstanding requests for new connections that the County has not approved because they do not meet the County's existing requirements under its new connection protocols. This is evidence of the County's objectivity. Additionally, entry of the Modification, will bring significant new penalties if the County makes capacity certifications that are inconsistent with the Modification and CAP.⁶⁸

Furthermore, <u>professional engineers</u> must <u>certify</u> available capacity before the County can approve new connection requests. Under Georgia law, these certifying professional engineers could face civil and criminal penalties, including the loss of their professional engineer certifications, if they fail to meet professional conduct and ethics standards.

The County and the individual professional engineers face significant consequences if they misapply, intentionally or mistakenly, the objective new connection requirements. And, EPA/EPD have oversight authority, including audit authority, under the Consent Decree and Modification.⁶⁹

Finally, the County disagrees that oversight from a third party is required to oversee the County's application of this objective protocol. As discussed above, the use of monitors or special masters is in this case would be against DOJ policy,⁷⁰ and no party to the Consent Decree or Modification supports the use of a special master here. Because the certification of new connections is based on an

⁶⁸ See id. (establishing \$10,000 and \$50,000 per connection penalties for minor and major new connections, respectively).

⁶⁹ See, e.g., Consent Decree at ¶ 29 [Dkt. 39].

See Pls' Mot. to Enter Rev. Modification to Consent Decree, Attach. 4 at 29-30 [Dkt. 72] (citing U.S. Dep't of Just., *Department Policy Regarding Special Masters*, at 2 [Dkt. 72-7]).

objective protocol and the EPA/EPD will retain oversight authority over implementation of this process, there is no basis in this instance for improperly giving control of certain government functions to an unelected third party.

(3) **Reference:** 3.5.1 Essential Services. The County may authorize a new sewer service connection or additional flow from an existing connection, even if it cannot certify that it has adequate treatment, transmission, or collection capacity for the following: health care facilities, public safety facilities, public schools, and government and other facilities even if credits through credit banking are not available. (P. 12).

SRWA Comments/Questions: A negative balance in the credit bank means that the County can connect new service even where there is no capacity. If the bank is empty there are no credits to be used. Again, this is an issue raised by EPA/EPD in a 10/18/19 email, Subject: Explanation for DeKalb's departure from items in EPA/EPD CAP Outline.⁷¹ 1) Is it the intent of EPA and GA EPD to exempt these services from having to comply with the Clean Water Act? 2) Under what authority is this exemption being made? 3) Is this exemption open-ended, e.g., no end date? 4) Does this exemption apply to like facilities located in non-priority areas?

DeKalb County Response: The County cannot speak for EPA/EPD. However, this essential services exception is an important and critical exception for the County, its citizens, and the public interest. The provision allows a very narrow exception to the general requirement in the Modification that the County's in-lieu credit bank must maintain a positive balance. Importantly, the negative balance is temporary, and the County would be prohibited under the Modification from authorizing any other new connections, until a positive balance is restored, unless those connections were also exempt. The central question presented is whether it is in the public interest to delay new health care and other essential services in the same way the County must delay economic development and housing under the Modification and CAP. The answer is unequivocally, "no" since these are essential services and their benefits far exceed the temporary risks

⁷¹ Supra note 65.

to the sewer system. Essential service provisions, like the provision in the Modification, are routinely included in consent decrees across the Southeast.⁷²

Finally, the Clean Water Act does not regulate new connections of any kind. However, it is common in EPA consent decrees for municipalities to accept restrictions on new connections, in an effort to reduce the <u>risk</u> of SSOs. The Modification balances that risk against the harms associated with delays in essential services.

(4) **Reference:** 3.5.2. Existing Illicit Connections. The County may authorize a new sewer service connection or additional flow from an existing connection, even if it cannot certify that it has adequate treatment, transmission, or collection capacity for any illicit connections or discharge of wastewater to the stormwater system or to waters of the state. The subtraction may result in a negative balance in the credit bank if sufficient credits are not available to offset the flow increase. (P. 12, Section 3.5.2).

SRWA Comments/Questions: A negative balance in the credit bank means that the County can connect new service even where there is no capacity. If the bank is empty there are no credits to be used. Again, this is an issue raised by EPA/EPD in a 10/18/19 email, Subject: Explanation for DeKalb's departure from items in EPA/EPD CAP Outline.⁷³ 1) Are all of these services also exempted from the requirements of the County's Municipal Stormwater MS4 permit issued under the Clean Water Act? 2) Under what authority is this exemption being made? 3) Is this exemption open-ended, e.g., no end date? 4) Does this exemption apply to illicit discharges located in non-priority areas?

DeKalb County Response: This limited exception to the broad prohibition against maintaining a negative balance in the County's in-lieu credit bank is

⁷² See, e.g., United States v. Columbia, 3:13-cv-02490TLW (D.S.C. 2013) (allowing the city to approve connections for essentials services even where the city cannot verify Adequate Transmission Capacity, Adequate Collection Capacity or Adequate Treatment Capacity); United States v. Chattanooga, 1:10-CV-281, Consent Decree at Sec. VI.20.(h).v. (E.D. Tenn. 2012) (same).

⁷³ *Supra* note 65.

unquestionably in the public interest, including first and foremost the interests of protecting the public health and environment. In some circumstances – often negligently, but sometimes intentionally – developers connect their sanitary sewer drains to the County's storm sewer. That is, they connect their toilets to infrastructure designed to carry rain directly to rivers. Where one of these unlawful connections is identified, the obvious, immediate remedy is to redirect the sanitary sewer flows to the sanitary sewer system.

Nothing about the illicit discharges exception in the CAP runs afoul of the Clean Water Act or the County's Municipal Separate Storm Sewer System NPDES permit.

(5) **Reference:** 4.1.1 Hydraulic Model. "The model will be used to simulate system response to a representative 2-year, 24-hour storm event and the results will be used to evaluate system capacity and provide a baseline for the credit banking system described in Section 5." Sound engineering judgement shall be employed in the use of the hydraulic model and in the analysis of the model results for determining whether the WCTS has adequate capacity" (P. 13)

SRWA Comments/Questions: The current dynamic models (Intrenchment Creek and Nancy Creek only) appear to be capable of determining the location of capacity-related sewage spills from the County's WCTS, for the storm parameter selected, but not for other probable events. As far as determining the likelihood of sewage spills, that is solely a function of the input parameters and the quality/applicability of the model used. As indicated above, the current criteria for acceptability of the system capacity from the 2019 models does not take into account probable, more intense storms, and the criteria for acceptance is not consistent with engineering standards. The lack of basin wide models and the use of the non-standard acceptance criteria result in complete unreliability of the condition and capacity of the overall WCTS. It would be expected that under the present conditions, sewage spills will continue unabated for the foreseeable future. The overall appearance is that DeKalb County designed these modeling criteria to assure approval of additional development and not for the purpose of determining the cause of sewage spills and corrective approaches for their elimination. (Randall Grachek, P.E., Newfields. Mr. Grachek is a professional engineer with experience designing wastewater treatment plants and evaluating CSO / SSO systems).

DeKalb County Response: The dynamic model is consistent with industry standards, has been peer reviewed, and is under review by EPA/EPD. The County agrees that the dynamic model under review by EPA/EPD meets the design criteria established in the Modification. The County, however, disagrees that the modeling criteria are deficient or will result in unreliable predictions. The County selected these criteria based on sound engineering and planning assessments. And the design storm event used – the two (2) year, twenty-four (24) hour event – is consistent with design storm events used by numerous other municipal sewer systems, including many under consent decrees, and is reasonable and appropriate for the County's system.

(6) **Reference: 4.1.2 System Flows.** "Dry-weather days were extracted from the flow survey data to calculate the average dry-weather flow (ADWF), which represents the average sewage loading that occurs on a daily basis." (P. 13)

SRWA Questions: 1) What is the design dry weather flow? In the Interim Sanitary Sewer Capacity Evaluation Program, December 15, 2017, the County states, "Engineering judgement shall be utilized and documented when evaluating acceptable capacity where the model predicts flow rates exceeding 85% of the pipe capacity due to reverse grade or flat-grade pipe segments." EPA commented that "85% is higher than industry standards for design dry weather flow." 2) What is the flow rate for reverse grade or flat-grade pipe segments?⁷⁴

DeKalb County Response: The average dry weather flow is calculated from actual flow recordings during the flow monitoring period used in the dynamic model calibration for dry weather periods (*i.e.*, periods following at least two (2) days of daily rainfall totals of 0.1 inches or less). The CAP will replace the Interim Sanitary Sewer Evaluation Program cited in the comment, which is what the County currently uses for authorizing new sewer service connections. The flow rate for reverse grade or flat-grade pipes, as with all pipes, varies during dry and wet weather. The dynamic hydraulic model is capable of simulating flow through all pipes regardless of their grade. Again, the dynamic model has been peer reviewed and is under further review by EPA/EPD.

⁷⁴ *Supra* note 65.

(7) **Reference: 4.2.2 Collection Capacity Definition.** "For the purposes of this paragraph, a surcharge condition shall mean the condition that exists when the supply of wastewater resulting from the 1-hour peak flow is greater than the capacity of the pipes to carry it and the surface of the wastewater in manholes rises to an elevation greater than the top of the pipe." (P. 14)

SRWA Comments/Questions: When wastewater in the pipe is greater than the capacity of the pipe then the pipe has surpassed being full. When wastewater enters the manhole, it is clearly above the top of the pipe which by definition throughout the MCD, is a surcharge condition. The need for "Adequate Collection System Capacity Surcharge Definition" was one of the issues raised by EPA/EPD during a November 5, 2019 meeting with DeKalb County.⁷⁵ It seems this critical issue was not resolved in a manner that meets the requirements of EPA and the Clean Water Act to protect the environment and public health. 1) What is the basis for allow the County to define Collection Capacity as a Surcharge Condition? 2) What is basis for excluding capacity related SSO since December 20, 2017?

DeKalb County Response: The Modification surcharge level is protective of the system, public health, and the environment. In fact, the County believes that the system can handle more surcharging than is allowed under the Modification without adversely impacting public health and the environment.

Additionally, the CWA does not regulate surcharging or other specific aspects of sewer system operations. Rather, the CWA regulates discharges to waters of the U.S. In the context of this negotiated settlement, the County has agreed to implement certain criteria in its system operations and planning. It is simply wrong to suggest that "adequate capacity" or "surcharging" can or cannot meet the requirements of the CWA, as there are no such requirements. Nonetheless, the Modification and the CAP are protective of human health and the environment.

Finally, capacity-related SSOs since December 20, 2017 are included, not excluded, in the CAP. Where such SSOs have occurred it triggers additional scrutiny and processes prior to certifying new connections upstream.

⁷⁵ Supra note 65.

(8) Reference: 4.4.1 Treatment Capacity Analysis Procedure. "The Pole Bridge Basin flows to the Pole Bridge WWTF (Wastewater Treatment Facility) and the Snapfinger Basin drains to the Snapfinger WWTF. Treatment capacity will be analyzed to ensure that both facilities operate in accordance to their respective NPDES (National Pollutants Discharge Elimination System) permits". (P. 15)

SRWA Comment/Question: The #2 Clarifier at the Snapfinger Wastewater Treatment Facility is not operational due to construction of the new facility at this site. Reduced capacity caused by lack of access to the #2 Clarifier is the cause of ongoing multi-million-gallon spills at 4557 Meadow Creek Path, located immediately upstream from the facility on Snapfinger Creek. These bypass spills are a violation of the facility's NPDES permit since they are not due to capacity limits in the sewer pipe that feeds directly into the facility but lack of capacity at the facility.

DeKalb County Response: Unlike many sanitary sewer consent decrees, the DeKalb County Consent Decree does not cover the wastewater treatment facilities. Indeed, the County's wastewater treatment facilities have exceptional compliance records and have won national recognition for their operations. For example, in 2016, the Snapfinger AWTF received the Georgia Association of Water Professionals ("GAWP") Plant of the Year. This award is given to facilities "whose performance is indicative of extraordinary effort to properly manage, operate, and maintain their facility."⁷⁶ The Snapfinger AWTF also received the GAWP Facility Platinum Award from 2012 to 2015. And the Polebridge AWTF facility received the GAWP Facility Gold Award in 2019 and 2020.

To improve the treatment capacity of the Snapfinger AWTF, the County is actually in the process of significantly expanding that facility to accommodate greater flows. Before initiating construction, the County evaluated the plant's capacity in the event that one of the system's clarifiers would need to be taken offline to accommodate new construction. Based on a state point analysis, a

⁷⁶ A description of the awards offered by the Georgia Association of Water Professionals is available at <u>https://www.gawp.org/page/OpenAwardsPrograms</u>.

mathematical modeling tool that predicts clarifier performance under varying flow and solid loading conditions, the County determined that removing the clarifier during construction to expand the capacity of the plant would not impact plant performance or capacity. Data collected from before and after the clarifier was taken offline does not suggest a deterioration in plant performance or an increased risk that the plant will not maintain regulatory compliance with its permits.

Moreover, the SSO location at 4557 Meadow Creek Path is over 5,000 linear feet upstream of the Snapfinger AWTF. The SSO occurrences at this location are due to a lack of capacity within the WCTS to convey high flows during severe wet weather events and not the treatment capacity at the AWTF. Capacity upgrades to address the issues at this location are part of the work identified for completion under the Modification.

(9) Reference: 4.5.2 New Connection Conditions Definition. The following define new connections.

1) "The dynamic model does not predict that, after adding the new sewer service connections, and/or increases in flow from the existing sewer service connections".

2) "The dynamic model does not predict that, after adding the new sewer service connections, and/or increases in flow from the existing sewer service connections, to all existing and authorized sewer connections, the wastewater in any manhole from the one (1) hour peak flow resulting from a representative two (2) year twenty-four (24) hour storm event will rise to an elevation within two (2) feet of ground surface at any location in the WCTS through which the proposed additional flows from the new or existing connection would pass".

3) "At least one (1) year has passed since completion of such Adequate Fix without a capacity-related SSO occurring at any such location (excluding those SSOs caused by severe, national conditions such as hurricanes, tornadoes, widespread flooding, earthquakes, and other similar natural conditions)."

4) "Or, each such location has experienced a 2-year, 24-hour storm event (or a 24-hour storm event of greater size) without a capacity-related SSO". (P. 15, Sec. 4.5.2)

<u>SRWA Questions</u>: 1) Does this "Conditions Definition" account for flow exceptions specified in the CAP related to: 1) capacity approval in lieu of

certification, 2) existing illicit connections, 3) essential services, 4) minor sewer connections? 2) What is the official definition of "Adequately Fixed"?

DeKalb County Response: The Modification provides three mechanisms for certifying new connections. First, the County may certify adequate collection, transmission, and treatment capacity. Second, the County may certify adequate treatment capacity and certify that the New Connection Conditions are met. Finally, the County may authorize new connections where in-lieu credits are available to more than off-set the expected increases in flow. Under the Modification, the County must "adequately rehabilitate, relieve, fix, or otherwise address" the cause of an SSO at locations "so that no future SSOs are predicted to occur at such locations as a result of a representative two (2) year twenty-four (24) hour storm event."⁷⁷

(10) Reference: 5 Banking Credit System. "As part of the Capacity Approval in Lieu of Certification Process described in Section 3.5, the County may use a "banking credit system" for the sewer line segment(s), lift stations, and/or wastewater treatment facilities (that are completed and in-use) for which the County is unable to certify adequate capacity. Capacity Enhancement Projects completed after entry of the MCD may earn credits in the credit banking system as well as those capacity enhancement projects completed after April 29, 2019". (P.17).

SRWA Comments/Questions: The scope of the proposed Banking Credit System is unreasonably broad and complex. One of the most obvious flaws is the assumption that Capacity Enhancement Projects in fact create capacity and the timetable for certification. In the CAP, Section 5.2 Deposits states "Within 12 months following approval of the CAP, and annually thereafter as necessary, the County shall perform a review of specific Capacity Enhancement Projects to determine if actual added capacity and peak flow reductions are in line with the County's original estimation for such projects." Banking credits should not be allowed without first certifying that capacity was in fact created. The "Scope of Projects Earning Banking System Credits" was one of the issues raised by

⁷⁷ See, e.g., Consent Decree Modification at \P 8 [Dkt. 72-2] (adding \P 35(j) to the Consent Decree).

*EPA/EPD during a November 5, 2019, "Justification for Key Differences in CAP Terms" meeting with DeKalb County.*⁷⁸

Additionally, the Banking Credit System process has significant conflict of interest implications arising from the professional engineer(s) having approval authority over this entire process also being employees of the County, directly or through contract. In order to address conflict of interest and ensure accountability, oversight, and final approval this process must be assigned to an objective thirdparty (special master) with no ties or allegiance to the County. 1) Which of the 103 projects and locations on the Priority Fix List are capacity enhancement projects? 2) Which capacity enhancement projects and locations completed after April 29, 2019 qualify for banking credits? 3) What is the relevance of the April 29, 2019 date?

DeKalb County Response: The capacity banking credit system proposed in the CAP is very similar to banking systems in capacity assurance programs in other EPA consent decrees throughout EPA Region 4.⁷⁹ Many of the comments above suggest a lack of understanding of how the credit system works and how the credit ratios work to create a margin of safety. These ratios are designed to take into account the reliability of the projected capacity increases (*i.e.*, the level of certainty that a specific project will actually create 100,000 gallons of capacity) and a margin of safety.

For example, a project to add a 100,000-gallon offline storage tank to relieve peak flows creates 100,000 gallons of additional capacity. This project, however, would only generate credits sufficient to authorize 100,000 gallons worth of new connections outside the PASARP or 50,000 gallons worth of new connections in the PASARP. If, on the other hand, the project is one to eliminate 100,000 gallons of infiltration/inflow (*i.e.*, unwanted water using up capacity), the project would generate credits sufficient to allow only 25,000 gallons worth of new connections in the PASARP or 33,333.33 gallons worth of new connections outside the PASARP. Thus, the banking system is designed to (i) increase capacity <u>before</u> allowing new connections, and (ii) ensure that the increased capacity equals, or

⁷⁸ Supra note 65.

⁷⁹ See, e.g., United States v. Chattanooga, 1:10-CV-281, Consent Decree at Sec. VI.20.(h).iv.(J) (E.D. Tenn. 2012).

more likely far exceeds, the capacity associated with the proposed new connections.

Appendix F of the Modification specifically identifies which of the 103 projects and locations on the Priority Fix List are capacity related. All capacity enhancement projects as defined by the CAP and completed after April 29, 2019 qualify for capacity banking credits. The cut-off date of April 29, 2019 represents a milestone date in the County's negotiations with EPA/EPD and is a negotiated term. Not inconsequentially, the actual impact of projects that have already been completed to date, including those since April 29, 2019, have been verified by the County's flow monitoring program.

With respect to the asserted conflict of interest, please see response at Part III, Section B(2) above.

(11) Reference 5.1 Capacity Assurance Information Management System. "The Capacity Assurance Program will utilize an information management system comprised of the County's CityWorks Computerized Maintenance Management System, the GIS, and other software to track and report sewer capacity request information. Additionally, the information management system will manage the recording and reporting of earned banking credits and the subsequent expenditure of those credits". (P. 17).

<u>SRWA Questions</u>: 1) When (date) will the Information Management System become fully operational? 2) Who is responsible for monitoring and ensuring system integrity particularly the recording and reporting of earned banking credits and expenditures?

DeKalb County Response: In anticipation of entry of the Modification, the Capacity Assurance Information Management System is already under development. Once fully developed and tested, the County must certify to EPA/EPD that the system is operational. EPA/EPD have oversight and auditing authority with respect to the banking system, and the County has specific documentation and records requirements associated with the CAP.

(12) **Reference 5.2 Deposits.** "Within 12 months following approval of the CAP, and annually thereafter as necessary, the County shall perform a review of specific Capacity Enhancement Projects to determine if actual added capacity and peak flow reductions are in line with the County's original estimation for such projects."

SRWA Comment: Twelve (12) months is too long to determine if the capacity the County claims has been created and actively using is actually factual. This analysis should be completed within a six (6) month period. This issue was also raised by EPA/EPD in email correspondence dated October 18,2019, Subject: Explanation for DeKalb's departure from items in EPA/EPD CAP Outline. "Why the first analyses should be completed within 12 months instead of 6 months" and again in a face-to-face meeting on November 5, 2019.⁸⁰

DeKalb County Response: The 12-month period for verifying the actual results from capacity enhancement projects is appropriate. A shorter period would be less efficient and would provide information that is less reliable (*e.g.*, it would necessarily be based on less flow monitoring data). A 12-month period is also used in other EPA consent decrees.⁸¹

(13) Reference 5.3 Capacity Enhancing Projects.

SRWA Question: What is the source of wastewater system engineering data used to establish and/or create calculations, estimated amounts, and credit reduction ratios for off-line storage, removal of connections, and pump station and gravity sewer improvement? Credit reduction ratios for these projects were the focus of *EPA/EPD* during a November 5, 2019, "Justification for Key Differences in CAP Terms" meeting with DeKalb County.⁸²

⁸² Supra note 65.

⁸⁰ *Supra* note 65.

⁸¹ See United States v. Chattanooga, 1:10-CV-281, Consent Decree at Sec. VI.20.(h).iv.(H) (E.D. Tenn. 2012).

DeKalb County Response: The parameters used to estimate the capacity gained from offline storage projects, projects to remove existing sewer service connections, and projects to improve pump stations and/or gravity sewers are defined in the CAP. Engineering data specific to each of these projects will be recorded in documents including, but not limited to, the project's engineering design documents.

Credit reduction ratios apply a factor of safety by reducing the estimated capacity gained from specific capacity enhancing projects by a factor which appropriately considers the accuracy of the measurement data used in determining the estimate. For example, the capacity gained from construction of offline storage is easily measured as the volume of the storage facility constructed and thus the credit reduction ratio for such projects is lower than other capacity enhancement projects. In contrast, the estimated capacity gained from removal of infiltration and inflow is variable and not as easily measured. Thus, the credit reduction ratio to be applied to capacity estimates for infiltration and inflow removal projects is 3:1 unless the project is in a Priority Area in which case the ratio to be applied is 4:1.

PART IV RESPONSES TO ADDITIONAL COMMENTS

Part IV provides responses to a variety of public comments provided in response to the Modification. Instead of reproducing the many, lengthy comments, a summary of each comment is provided in *italic font*, following by the County's response.

Public Comment Regarding Green Street Project: One commenter expresses concern about the County's efforts to rehabilitate a portion of the system related to the "Green Street Project." This commenter asserts that the project was ineffective, citing overflows that occurred during Hurricane Delta after the County completed a portion of its capacity-expansion project at this location. This commenter requests that the Modification be revised to (1) require the County to design its system to account for a 10 or 20 year storm event and (2) allow EPA/EPD to have oversight over completed construction projects. This commenter also raises concerns about the needs of minority communities in DeKalb County and contends that the Modification should be revised to account for these communities. This commenter also attached materials and articles about *the project, as well as a redacted email thread concerning the overflows during Hurricane Delta.*⁸³

DeKalb County Response: The County agrees that it would be more protective of the environment and the system if it were designed to accommodate severe storms like Hurricane Delta. However, doing so would be out of line with industry standards and would cost the citizens of DeKalb orders of magnitude more, while providing only marginal reductions in SSOs.

The "Green Street Project" was designed to be completed in three phases. To date, the County has completed Phase I and Phase II and replaced over 1,500 LF of sewer at the site of the historical SSOs and included sewer rehabilitation upstream of the site. This project reduced the potential for overflows during wet weather as evident by the fact the sewer did not overflow in this area during severe storms, including Hurricanes Sally and Zeta. While an SSO did occur at this location during Hurricane Delta, a storm associated with severe rainfall conditions, additional work within the system as part of phase III and a specific trunk sewer project downstream are expected to further reduce the likelihood of an SSO, even under Hurricane Delta conditions. The County has been transparent with the impacted community about this project, the status of the project, and about the additional trunk sewer project downstream, which is included in the work contemplated under the PFL program included in the Modification.

Additionally, the Modification provides EPA/EPD with oversight and audit authority, above and beyond what the Clean Water Act provides for.

Finally, the County appreciates and shares the commenter's concerns about potential disparate impacts to minority communities in DeKalb County and believes that the Modification ensures that these communities' broad interests are balanced and furthered as the County fixes its system.⁸⁴

⁸³ See comment submitted by Ash Miller [Dkt. 72-4 at 17-68].

⁸⁴ See also comments submitted by Teresa Hardy, *NAACP* [Dkt 72-3 at 26-29] (noting that "[t]he modification proposed would address those unintended consequences [of the 2011 Consent Decree] and provide a path forward for important environmental, social and economic opportunities in South DeKalb much sooner than may occur without the modification"); and Larry Johnson, *District 3 Commissioner* [Dkt 72-4 at 3-5] (noting that the 2011 Consent Decree was a "one-size-fits-all approach" and that the Modification "ensures that parts of

Public Comment Alleging Use of Unlicensed Engineer Firms and Contractors: One public commenter asserts that the County has "allowed unlicensed engineer firms and contractors to operate on federal consent decree contracts for years." This commenter indicates that this is a violation of Georgia state law and that she has asserted these allegations in "complaints [filed] since 2016 with the Georgia State Board of Engineers, Georgia State Board of Utility Contractors, DeKalb County Solicitor, DeKalb County Ethics Board, the DOJ, EPA OIG, etc."⁸⁵

DeKalb County Response: This comment has no bearing on the Modification or the issue of whether its entry is in the public interest. The commenter has raised these claims in several other forums. The County has reviewed these claims and found them to be without merit. It vigorously disputes the allegations and has defended, and will continue to defend, itself in these other forums, as appropriate.

Public Commenter: One commenter asserts a variety of allegations related to the County's initial slow start when implementing the original CD and alleges that a complaint he filed with the EPA has not been acted upon by any relevant agency. This commenter also suggests that the County has "covered up Environmental Racism issues" that are impacting citizens in South DeKalb. Additionally, the commenter asserts that there are outstanding issues related to air quality and the County's implementation of FOG programs.⁸⁶

DeKalb County Response: The County has accepted responsibility for its slow start in the early years of Consent Decree implementation.⁸⁷ Since 2017 and the election of the County's current CEO, Michael Thurmond, however, the County has made a significant efforts towards fully complying with the terms of

the County still in need of economic development can received individualized attention without adversely impacting the environment").

⁸⁵ See comment submitted by Loretta Washington, *LCW Engineering, Inc.* [Dkt 72-4 at 73-113].

^{See comment submitted by Clarence Williams,} *JusticeOnChapelHill* [Dkt.
72-3 at 59-212].

⁸⁷ See, e.g., Consent Decree Modification at 2 [Dkt. 72-2].

the Consent Decree.⁸⁸ And the County is committed to fixing its system in the right way.

The County has also placed a greater emphasis on public transparency since 2017. It remains committed to continuing to provide the public with information related to the implementation of the Consent Decree and the Modification. In this regard, the Modification provides more onerous requirements, more deadlines, stricter penalties, and enhanced reporting, all of which will increase transparency and improve the system and the County's operations.

With respect to the commenter's allegations of historical environmental racism, CEO Thurmond has acknowledged the long history of environmental racism, as well as the County's historical role in perpetuating these disparities.⁸⁹ In fact, CEO Thurmond raised the issue of environmental justice and fought to ensure the Modification was structured in a way that would help the County to better serve its most vulnerable populations and to ensure that the estimated \$1,000,000,000 expected investment was not made with a blind eye to these disparities.

The Modification – specifically the CAP – will allow the County to support economic development in its underserved, low-income, and minority areas, while the system is being fixed. From CEO Thurmond's perspective, it would be unacceptable to force these communities to forego economic development for several more years. Many of these communities have disproportionately suffered the effects of SSOs, as some of these areas contain many of the major capacity related repeat SSO locations on the Priority Fix List. Additionally, these areas will bare more of the burden of the disruptions associated with the lengthy construction projects needed to fix these capacity issues. With the Modification, these communities do not also have to suffer from additional sewer capacity-based obstacles to new housing, grocery stores, and new businesses. The Modification avoids this potential revictimization of these underserved populations.

Consistent with the County's view of the Modification, public commenters have also recognized that the Modification will benefit underserved and minority populations in DeKalb County. A commenter from the NAACP and

⁸⁸ See, e.g., *id.* at 3-4.

⁸⁹ *Supra* note 27.

Commissioner Larry Johnson, who represents much of South DeKalb, expressed their views that the Modification will help the County to better address the needs of its sanitary-sewer system and encourage economic development in underserved and impoverished areas.⁹⁰ According to Commissioner Johnson, "[t]he original Consent Decree signed in 2011 took a 'one-size-fits-all' approach that penalized parts of [his] District in South DeKalb. The more nuanced approach in the proposed Modification avoids 'revictimizing' [his] constituents and brings much needed equity."⁹¹ In his view, "the Modification ensures [1] that parts of the County still in need of economic development can receive individualized attention without adversely impacting the environment" and "[2] that the important – and frankly long overdue – sewer infrastructure upgrades within [his] District occur in a timely fashion."⁹²

The comments concerning air quality and the implementation of the County's FOG programs are not relevant to the issue of whether entry of the Modification is in the public interest. Nonetheless, the County disagrees with the commenter's assertion that the County's FOG program has been ineffective. Since implementing the Consent Decree, the County has removed over 25 million gallons of FOG from its system.⁹³

The County cannot comment on this commenter's complaint filed with the EPA but notes that the allegations are historical and have no bearing on the County's current ability and commitment to implement the Modification.

Public Comments on Economic Development: Several commenters assert that the Capacity Assurance Program will help to support economic development – particularly by helping the County to approve outstanding capacity requests. According to one commenter, "the County currently has 379 outstanding capacity requests (as of October 2020). These requests include single family homes, a

⁹² *Id.*

⁹⁰ See comments submitted by Teresa Hardy, *NAACP* [Dkt 72-3 at 26-29]; and Larry Johnson, *District 3 Commissioner* [Dkt 72-4 at 3-5].

⁹¹ See comment submitted by Larry Johnson, *District 3 Commissioner* [Dkt 72-4 at 3-5].

⁹³ See Consent Decree Modification at 3 [Dkt. 72-2].

school, small commercial businesses, and larger multi-use developments. Some projects have been stalled for years due to the lack of capacity; others have decided to abandon projects or reduce the original scope. Without the Modification and the CAP, the County may be unable to approve any of these new sewer connections and economic development in the county may be stalled."⁹⁴

DeKalb County Response: The County agrees that the Consent Decree Modification will help the County support economic growth and allow it to responsibly and protectively clear the back log of outstanding capacity requests. The County also believes that this can be done while balancing its equal priority of protecting the County's environmental gems.

Public Comments in Support of the Priority Fix List: Several public commenters indicate support for the modification because it will "address repeat sewer spill sites."⁹⁵

DeKalb County Response: The County agrees that the Modification goes beyond the original requirements of the Consent Decree and adds many additional requirements, including the requirement to adequately fix locations identified on the PFL that have experienced repeat SSOs and those locations that experience qualifying repeat SSOs during the implementation of the Modification. This requirement is unique to the Modification and is not commonly found in other consent decrees in Region 4. By adequately fixing the locations located on the PFLs and those that experience repeat SSOs, the County will reduce instances where locations experience repeat SSOs.

⁹⁴ See comment submitted by James Tsismanakis, *DeKalb Chamber of Commerce* [Dkt. 72-3 at 13-15.]; *see also* comments submitted by Jason Lary, *Mayor of Stonecrest* [*id.* at 56-58.]; Steve Bradshaw, *District 4 Commissioner* [*id.* at 40-42]; Ann Hanlon, *Perimeter Community Improvement District* [Dkt. 72-4 at 115-116]; Emory Morsberger, *Metro South Community Improvement District* [*id.* at 44-46]; and Dorian DeBarr, *Decide DeKalb* [Dkt. 72-3 at 17-19].

⁹⁵ See comment submitted by Emory Morsberger, Metro South Community Improvement District [Dkt. 72-4 at 44-6]; see also comment submitted by Kevin Jeselnik, DeKalb County Watershed Capital Improvements Program Advisory Group [Dkt. 72-3 at 214-219].

Public Comment on Necessity of Extension of PASARP Deadline: At least one public commenter acknowledges that "the original deadline to complete work in the PASARP has passed, and that an extension to allow the County to complete this essential work of investigating and rehabilitating the system within the priority areas" is necessary.⁹⁶

DeKalb County Response: The County agrees that the extension provided in the Modification to complete the rehabilitation required by the PASARP is critical to ensuring that the County can adequately rehabilitate its WCTS and reduce instances of SSOs. Without modification, the County will be subjected to heavy penalties for failing to comply with the June 2020 deadline identified in the Consent Decree. These penalties will divert critical funds from the County's ability to implement the complex construction projects required to rehabilitate its system. The deadline provided in the Modification to rehabilitate all of the areas within the PASARP by December 2027 is aggressive yet attainable. Allowing the County to address those areas in the PASARP by this date is in the public interest.

Public Comment in Support of Interim Milestones: A variety of public commenters support entry of the Modification because it "sets final deadlines, interim milestones and a robust reporting schedule to both the regulators and the Court to measure progress."⁹⁷

DeKalb County Response: The County agrees that the Modification provides a variety of mechanisms that are designed to provide increased oversight as the County implements the Modification. Under the Modification, the County is subject to increased reporting requirements and substantially more onerous stipulated penalties. Additionally, the Modification contemplates milestones, such as the requirement to complete and report on the minimum liner footage rehabilitated in a calendar year, and imposes deadlines, such as the requirement to

⁹⁶ See comment submitted by Kevin Jeselnik, *DeKalb County DeKalb County Watershed Capital Improvements Program Advisory Group* [Dkt. 72-3 at 214-219].

⁹⁷ See comment submitted by Steve Bradshaw, District 4 Commissioner [Dkt. 72-3 at 40-42]; see also comments submitted by Emory Morsberger, Metro South Community Improvement District [id. at 13-15]; Jason Lary, Mayor of Stonecrest [id. at 56-58]; Bill Floyd, DeKalb Municipal Association [id. at 37-39]; and Lorraine Cochran-Johnson, District 7 Commissioner [id. at 23-25].

fix PFL locations within established deadlines. These milestones and firm deadlines will help to ensure that the County remains on track towards the overarching objectives of the Consent Decree.

Public Comment in Support of the Modification's Impact on Low Income and Minority Populations: One public commenter highlights concerns related to Opportunity Zone Program, which provides tax incentives to encourage development and long-term investment. According to this commenter, opportunity zones located in South DeKalb are "slated to bring the type of high-quality business including a grocery store to mitigate the impacts of a food dessert, that leadership and citizens of that part of county have been requesting for decades." According to this commenter, "[w]ithout modifications to the Consent Decree, South DeKalb risks continued stagnation and will miss out on the very opportunities that could positively impact the quality of life in that part of the county."⁹⁸

DeKalb County Response: The County agrees that the Modification, particularly the CAP, will help to ensure that the County can fully leverage Opportunity Zones and tax incentives to encourage development in underserved portions of the County. Without the CAP, which sets parameters for approving requests for new connections or increases in flow, and the accompanying credit banking system, the County may be forced to turn away development opportunities in these areas. This would undermine the very purpose of the Opportunity Zone Program and would only serve to further harm these communities.

Public Comment on Modification Timeline: One commenter requests that the CD Modification be extended past the current CEO's tenure.⁹⁹

DeKalb County Response: Under DeKalb County's municipal code, a chief executive officer serves the County for a term of four years and must be reelected to continue serving in that position.¹⁰⁰ The County's current CEO, Michael

⁹⁸ See comment submitted by Dorian DeBarr, Decide DeKalb Development Authority [Dkt. 72-3 at 17-19].

⁹⁹ See anonymous comment raising issues related to the tenure of the CEO [Dkt. 72-3 at 10].

¹⁰⁰ DeKalb County Municipal Code § 5(b).

Thurmond, was elected in 2016 and began serving the County in 2017. CEO Thurmond was re-elected as the County's CEO in 2020 and his current term will expire in 2025. The Modification gives the County until December 2027 to rehabilitate all areas in the PASARP and requires the submittal of a PASARP report thereafter. This date extends past CEO Thurmond's current term.

PART IV GLOSSARY OF TERMS AND ACRONYMS

CAP – Refers to the Capacity Assurance Program as described in the Modification.

CSARP – Refers to the Continuing Sewer Assessment and Rehabilitation Program, which includes the PASARP and the OSARP, as described in the Consent Decree.

DWM – Refers to the Department of Watershed Management in DeKalb County that oversees the implementation of the Consent Decree and the Modification.

EPA – Refers to the U.S. Environmental Protection Agency.

EPD – Refers to the Georgia Environmental Protection Division of the Georgia Department of Natural Resources.

FOG – Refers to fats, oil, and grease that may block or damage the sanity sewer system.

Infiltration and Inflow ("I/I") – Refers to stormwater that enters the sanitary sewer system through cracks in the pipe, defective manholes, and unauthorized connections (*e.g.*, storm drains and gutters mistakenly tied into the sanitary sewer, rather than the storm sewer). I/I limits the system's capacity during wet weather and leads to SSOs.¹⁰¹

PASARP – Refers to the Priority Areas Sewer Assessment and Rehabilitation Program as described in the Consent Decree and the Modification.

PFL – Refers to the Priority Fix List as described in the Modification.

¹⁰¹ See supra note 28.

OSARP – Refers to the Ongoing Sewer Assessment and Rehabilitation Program as described in the Consent Decree.

Surcharge Condition – Describes a modeled condition above a set standard, where the risk of an SSO or damage to the system may unreasonably increase. The level of surcharge for such segments depends on how much pressure that specific system infrastructure can safely take without risking damage or leaks and is determined by looking at the pressure rating of pipe materials and joints, field pressure testing results, and other information about the surrounding infrastructure within the system.

SRWA – Refers to the South River Watershed Alliance.

SSO – Refers to Sanitary Sewer Overflows, which occur when the sanitary sewer system operates above capacity and overflows.

Trunk Sewers – Refers to a large sewer line or a main sewer line that receives wastewater flow from lateral or smaller-connecting lines and conveys that wastewater to treatment facilities.

WCTS – Refers to DeKalb County's Wastewater Collection and Transmission System. As defined in the Consent Decree, "Wastewater Collection and Transmission System' or 'WCTS' shall mean all wastewater collection and transmission systems, including all pipes, lift stations, Force Mains, Gravity Sewer Lines, manholes and other appurtenances thereto which are owned or operated by the County, except for those portions of a system or systems for which another entity is legally responsible for maintenance."¹⁰²

¹⁰² Consent Decree at 17 [Dkt. 39].

Attachment A

DeKalb Watershed Management receives top award



LOCAL NEWS

By Juanita Love Dec 4, 2019

The DeKalb County Department of Watershed Management (DWM) was recently recognized with a top award for outstanding wastewater collection system operations, according to a press release.

"After many years of mismanagement and dysfunction, this award is evidence that the DeKalb County Watershed Management Department has made verifiable progress and improvement," said DeKalb County CEO Michael Thurmond. "DeKalb has prioritized enhancing customer service, properly treating wastewater to protect the environment and ensuring the viability and integrity of the system."

DWM was awarded the 2019 Collection Systems Gold Award at the Georgia Association of Water Professionals (GAWP) Fall Conference for operating the wastewater system in an outstanding manner. GAWP is Georgia's largest professional water and wastewater organization and recognizes organizations that take exceptional efforts to properly manage, operate and maintain collection systems.

The GAWP award recognizes utilities that strive to continually improve their systems through proper management, maintenance, and operation. The award criteria follow the practices set forth in the DeKalb County Capacity, Management, Operation and Maintenance program including preventative maintenance, system evaluation, rehabilitation programs and training, among many others.

DeKalb County annually processes, treats and releases 12 billion gallons of clean water into the South River through two wastewater treatment plants, Snapfinger and Pole Bridge. The plants have also been recognized by GAWP for 100 percent compliance with pollutant removal levels set by the United States Environmental Protection Agency and the Georgia Environmental Protection Division.

Attachment B

Jacobs Firm Overview

Jacobs leads the industry throughout the entire water cycle—delivering integrated water and wastewater solutions for a more connected, sustainable world. With \$13 billion in combined revenue and a talent force of more than 52,000, we are an international construction and engineering company providing the full spectrum of professional and field services.

Jacobs and its subsidiaries form an organization comprised of approximately 250 operating companies and affiliates throughout the U.S. and in



several countries around the world. We are a publicly-owned corporation traded on the New York Stock Exchange (NYSE: JEC). We are linked and networked with national and international water professionals and are recognized as the:

- #1 Engineering Firm by the Atlanta Business Chronicle
- 2020 Georgia Engineering Employer (Company) of the Year by the American Council of Engineering Companies (ACEC)
- #1 Design Firm by Engineering News-Record

Our Atlanta office has been conducting business as a professional engineering and architectural firm for more than 60 years. Our Midtown Atlanta office houses 265 water staff—the largest of any water business in Georgia—consisting of a powerful collection of global subject matter experts, project delivery professionals, and the same best-in-class talent who have been serving Georgia clients for decades. Our award-winning engineering projects have been celebrated by local, regional, and national chapters of the American Society of Civil Engineers and the American Consulting Engineers Councils, EPA, among others and include:

Organization	Award	Project
EPA	Award of Excellence for Large Surface Water System EPA Region 4 Multiple Years	Tom Lowe Atlanta-Fulton County WTP, Atlanta-Fulton County Water Resources Commission, Georgia
Partnership for Safe Water	Director's Award	Beaufort Jasper Water & Sewer Authority Chelsea WTP
Partnership for Safe Water	Director's Award	Spartanburg Water System R.B. Simms WTP
Georgia Chapter - American Concrete Institute	Award of Excellence - Public Works Building Category	Town Creek WTP, Macon Water Authority, Georgia
American Council of Engineering Companies	Engineering Excellence Awards Competition National Recognition Award	F. Wayne Hill Water Resources Center, Gwinnett County, Georgia
Association Society of Civil Engineers	Outstanding Civil Engineering Achievement Award (Large Projects)	Chattahoochee Tunnel, Cobb County, Georgia
American Council of Engineering Companies	State Award Engineers Week Engineering Excellence	Chattahoochee Tunnel, Cobb County, Georgia
ASCE Georgia Section	Civil Engineering Achievement Award (Large Project > \$3,000,000)	Nancy Creek Tunnel & Influent Pumping Station, City of Atlanta, Georgia



American Council Of Engineering Companies of Georgia and the Georgia Engineering Alliance	Engineers Week, Engineering Excellence	Flat Creek Water Reclamation Facility Upgrade Gainesville, Georgia
Construction Management Association of America	Construction Management Project Achievement Award Infrastructure Project with Constructed Value Greater than \$100 Million	F. Wayne Hill Water Resources Center, Phase 2, Gwinnett County, Georgia
Construction Management Association of America	Construction Management Project Achievement Award Infrastructure Project with Constructed Value Greater than \$100 Million	Shoal Creek Filter Plant, Gwinnett County, Georgia
American Public Works Association	Project of the Year Award Environment More than \$100 million	Nancy Creek Tunnel Sewer Relief, City of Atlanta, Georgia
American Academy of Environmental Engineers (AAEE)	"Excellence in Environmental Engineering (E3)" – Design Category	F. Wayne Hill Water Resources Center Phase 2 Expansion, Gwinnett County, Georgia
Georgia Engineering Alliance	Georgia Engineers Week Engineering Excellence	Nancy Creek Tunnel and Influent Pumping Station, City of Atlanta, Georgia
Association of Water Professionals Gold and Platinum Awards	Georgia and US EPA Plant of the Year Award	F. Wayne Hill Water Resources Center, Gwinnett County, Georgia
Construction Management Association of America	Project Achievement Award Constructed Value Between \$50 & \$100 Million	R. L. Sutton Water Reclamation Facility Solid Handling Improvements Project, Cobb County, Georgia
Georgia Association of Water Professionals	Biosolids/Residuals Excellence Award in the category of Technology Innovation and Development	City of Cartersville, Georgia
Association Society of Civil Engineer Georgia Section	Outstanding Civil Engineering Achievement Award (Large Project)	West Area CSO Tunnels and Pumping Station, City of Atlanta, Georgia
Georgia Engineering Alliance	Georgia Engineers Week 2010 Engineering Excellence	West Area CSO Tunnels and Pumps Station, Atlanta, GA
Construction Management Association of America	Project Achievement Award Infrastructure Project with Constructed Value Greater Than \$150 Million	Yellow River Water Reclamation Facility Improvements, Gwinnett County, Georgia
AGC Build Georgia	First Place	Yellow River WRF Operations Building, Gwinnett County, Georgia
American Society of Civil Engineers	Award of Excellence Low-Rise Buildings Category	Yellow River WRF Improvements Project Gwinnett County, Georgia

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Wet Weather Management Services

Jacob's Wet Weather Management Services core technology, provided by our Conveyance & Storage Global Solutions and Technology Team, offers comprehensive management and engineering services that help our clients meet regulatory requirements, address capacity issues, and create a sustainable balance of grey and green system solutions for their infrastructure. We make key contributions to climate resilient cities with healthy aquatic environments.

Water utility managers face complex challenges related to population growth, aging infrastructure, climate change, regulatory change, and increasing demand for integrated watershed solutions.

Our vision is to lead the development and implementation of fully integrated solutions for drinking water, wastewater and stormwater conveyance system management, providing sustainable and resilient systems for people and the environment.

Jacob's Conveyance & Storage Infrastructure Services include six core technologies:

- Wet Weather Management
- Advanced Hydraulics
- Water Distribution
- Conveyance Engineering
- Condition Assessment and Rehabilitation

Dams

Jacobs has expertise in all aspects of collection systems, including the pipelines and appurtenances that collect and convey stormwater and wastewater, and those that convey treated effluent to and from treatment facilities. **Wet Weather Management Services** includes:

- Master planning
- Long-term control plan (LTCP) development for combined sewer systems (CSS)
- Sewer system evaluation survey (SSES), and inflow and infiltration evaluations, including private sector programs
- System modeling and optimization
- Green infrastructure planning and design integrated with traditional gray programs
- Assistance with regulatory issues and compliance

Facilities and Master Planning

Planning for the future—assessing risk, evaluating options—is always a challenge. Jacobs has a wealth of expertise and skills to help our clients meet

challenges associated with growing and shifting demands on individual facilities and overall systems, changing regulations, climate change and economic constraints.



Effective wastewater collection systems management requires the ability to blend green and grey solutions

Wet Weather Management Services

Our Facilities and Master Planning service offerings include:

ACOBS

- Projections of future population and wastewater generation
- Sewer collection system modeling
- Evaluation and optimization of green infrastructure as a part of collection systems
- System capacity analysis
- Design and performance criteria development
- Cost estimating
- Overall program and construction scheduling
- Alternative optimization
- Evaluating climate change impacts

CSS LTCP Development

Jacobs has extensive experience in developing LTCPs for our clients CSSs that allow them to achieve regulatory compliance. Our service offerings range widely from overall program management to innovative technologies for green solutions, including:

- Program management for both planning and implementation
- Storage and conveyance capacity expansion
- Green infrastructure program
 development
- Nine minimum controls assistance
- EU Water Framework Directive

Sanitary Sewer System Evaluation

Sanitary sewer system overflows (SSO), caused by aging infrastructure, increased population/demand, and leaks and breaks in collection systems, often result in violations of regulatory consent decrees. Our significant depth of knowledge in conducting SSESs and developing Sewer Evaluation and Capacity Assurance Plans (SECAPs) allows us to assist our clients in achieving compliance.

Our expertise includes:

- Project management/coordination
- System evaluation
- Flow and asset condition data analysis
- Infiltration and inflow (I&I) reduction studies

System Modeling and Optimization

From collection system modeling to leading the development and use of advanced collection system optimization technologies, we offer comprehensive and cost-effective programs that blend technologies to address wet weather problems. Our service offerings include:

- Hydrologic and hydraulic model development
- Infiltration and Inflow (I/I) analyses (for example RDII)
- Complex interactions in cities for water quality and flood management
- Green infrastructure simulation and optimization with gray programs
- Preliminary design of system improvements, including pump stations modifications, high rate treatment designs for CSO/SSO discharges, and design of inline and offline storage facilities
- Development, evaluation and optimization of Real-time Control facilities and strategies

Regulatory Compliance

- Capacity, Management, Operations, and Maintenance (CMOM) program development and assistance
- Regulatory consultation and negotiations

Specialized Tools and Services

In addition to our expertise in commercially-available tools, Jacobs offers clients a number of customized, in-house tools, including:

- SCREAM, a risk evaluation and sewer condition assessment tool
- Cost estimating tools (PACC, CPES, TIMBERLINE)
- Carbon Footprint assessment tools (SI PORT)
- Automation & Optimization tools (Simlink, Voyage, Replica)
- Climate change evaluation (SimCLIM)
- Green Infrastructure/LID tools

Conveyance Industry Leadership



Our professionals are active in many major wet weatherrelated professional organizations globally. In the US we participated in development and delivery of WEF's *Core Attributes of Effectively Managed Wastewater Systems,* authored WEF's *Guide to Managing Peak Wet Weather Flows in Municipal Wastewater Collection and Treatment Systems* and contributed to WERF's *Using Flow Prediction*

Technologies to Control Sanitary Sewer Overflows, as well as various practice manuals. In the UK we authored OFWAT's Drainage Strategy Framework and

Defra's Surface Water Management Plan technical guidance. We are steering the development and application of new 'WaPUG' model calibration standards.

Contact Us

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Jacobs

Engineering News-Record has ranked **Jacobs No.1** in its list of **Top 500 Design Firms in the world.**



"Over the last two years Jacobs has been transformed by strategic acquisitions and divestitures, along with the launch of our new brand – and through it all, we continue to build a strong inclusive culture where people are inspired to innovate new solutions for ourselves and our clients. ENR's recognition of Jacobs speaks to our diverse team of visionaries, thinkers and doers that live our values every day and continue challenging today to reinvent tomorrow."

– Steve Demetriou, Jacobs Chair and CEO

About Jacobs

At Jacobs, we're challenging today to reinvent tomorrow by solving the world's most critical problems for thriving cities, resilient environments, mission-critical outcomes, operational advancement, scientific discovery and cutting-edge manufacturing, turning abstract ideas into realities that transform the world for good. With \$13 billion in revenue and a talent force of more than 55,000, Jacobs provides a full spectrum of professional services including consulting, technical, scientific and project delivery for the government and private sector. Visit jacobs.com and connect with Jacobs on Facebook, Instagram, LinkedIn and Twitter. Engineering News-Record has ranked Jacobs No. 1 in its list of Top 500 Design Firms for a third consecutive year. Widely considered the industry benchmark, the annual list ranks both publicly and privately held U.S. companies, based on revenue for design-specific services performed in the previous year. ENR's report indicates that in 2019 the market showed some of the best growth in ten years. The firms surveyed had record design revenues, up 2% from 2018.

Jacobs has held a top five position in the Top 500 list since ENR's rankings began in 2003. As highlighted in our 2019 Integrated Annual Report, we aim higher and don't settle — always looking beyond to raise the bar and deliver with excellence. We are committed to our clients by bringing innovative solutions that lead to profitable growth and shared success.

2020 ENR RANKINGS

#1

Sanitary & Storm Sewers Sewer & Waste Wastewater Treatment Plants Water Transmission Lines & Aqueducts #2 —

Water Supply Water Treatment, Desalination Plants

2020 ENR Sourcebook

