



August 22, 2025
Morgan City, Louisiana

Re: Written Testimony to the Mississippi River Commission during its Low Water Inspection Tour

The Tulane Institute on Water Resources Law & Policy appreciates this opportunity to provide testimony to the Mississippi River Commission. These comments are not made on behalf of Tulane University or Tulane Law School and do not necessarily reflect the policies and positions of Tulane.

The Mississippi River is constantly undergoing changes, as the members of the MRC are well aware. Our previous testimony to the MRC has focused on the changing landscape for federal agencies, particularly with respect to environmental regulatory programs, as well as the growing demands on—and competition for—the waters of the river and its tributaries and distributaries (including its associated aquifers). In the past year, these issues have only become more relevant. Our comments today focus on two key areas that underscore just how important it is for the MRC to look more directly at water supply and public needs. First is the dramatic shift in federal funding and regulatory oversight that both directly and indirectly impact work in the Mississippi River & Tributaries (MR&T). Second is changing water demands as the river itself changes.

The Mississippi River Commission must be prepared for the continued retreat in federal funding and regulatory regimes.

In the past several months, the capacity of federal agencies has been significantly limited, from staffing to funding to the scope of work. Longstanding federal funding for important programs can no longer be relied upon for future decision-making. The Army Corps has not been immune to these changes. The recent cancellation of funding for the Lower Mississippi River Comprehensive Study will delay or prevent critically important work. Many of the issue areas identified before the study's pause warrant further attention, like exploring the relationship of groundwater to the MR&T. One notable example is the issue of saltwater intrusion, its harsh impacts on Plaquemines Parish, and the looming threat to water supply in Greater New Orleans. These problems will persist whether we study them or not.

Many federal agencies that partner with or whose work supports Corps programs also face significant cuts. For example, the Federal Emergency Management Agency (FEMA) is no longer providing funding to support New Orleans' efforts to find long-term drinking water solutions. Other changes, such as cuts to FEMA's hazard mitigation program, and reductions in conservation spending at the U.S. Department of Agriculture, could leave many areas unprepared for flood-related disasters. Moreover, proposed cuts to critical research and monitoring programs at the U.S. Geological Survey and the National Oceanic & Atmospheric Administration threaten to undermine important efforts to understand and manage this dynamic river system.

Federal funding is not the only thing being reduced; so too is the reach and application of numerous federal environmental laws. Since the Supreme Court's decision in *Sackett v. EPA*, the Army Corps' Clean Water Act (CWA) jurisdiction is much more limited, meaning fewer geographic areas and individual projects are subject to regulatory review.¹ Changes to the National Environmental Policy Act's (NEPA) administration and interpretation are also of concern. The management of the Mississippi River demands robust internal and stakeholder interactions. Minimal compliance with NEPA and the CWA has never been sufficient to meet that demand and certainly will not be now. The Corps and MRC need to find new or additional ways to stay abreast of changes in the ever-changing river and its uses.

Recent court decisions have held that the White House Council on Environmental Quality, the primary body overseeing NEPA's implementing regulations since the 1970s, does not have the authority to issue regulations, leaving those interpreting regulations to individual agencies.² The procedural framework is changing as well, limiting opportunities for public participation.³ Nevertheless, environmental review is fundamental to the Army Corps' work throughout the MR&T. Continued public meetings, notices, and proactive community engagement must be prioritized despite uncertainty regarding NEPA's future. This isn't to say the NEPA process can't be improved upon. Innovation and continued efforts with entities like the Federal Permitting Improvement Steering Council should continue. But the failure of New Orleans' levees during Hurricane Katrina contrasted with the successes of the Hurricane and Storm Damage Risk Reduction System (HSDRRS) during Hurricane Ida and others illustrate the costs of life without NEPA and the benefits of NEPA executed on an expedited timeline. Following Hurricane Katrina, Congress established the Civil Works Levee Safety Program to improve consistency and coordination with local sponsors.⁴ However, there have been recent reports regarding threats to the integrity of HSDRRS from subsidence and uncertainty over the future of the Corps' budget for inspections.⁵ How does the MRC plan to address these concerns, especially with uncertainty in the federal budget? How can past lessons continue to be applied even amidst these changes?

Growing demands for water in the Mississippi River system warrant further attention from the MRC and Army Corps districts.

Simply put, it is difficult to manage a resource without knowing how much of it is available and who relies on it. It has been hard enough to do that with existing water uses, but new industries

¹ *Sackett v. Environmental Protection Agency*, 598 U.S. 651 (2023).

² *Marin Audubon Society v. Federal Aviation Administration*, No. 23-1067 (D.C. Cir. 2024). A federal district court in North Dakota reached a similar ruling in early 2025. *Iowa v. Council on Environmental Quality*, 765 F.Supp. 3d 859 (N. D. 2025).

³ Steve Barringer & Kerri Barsh, *Federal Agencies Roll Out New NEPA Regulations*, NAT'L LAW REVIEW (July 10, 2025), <https://natlawreview.com/article/federal-agencies-roll-out-new-nepa-regulations>.

⁴ ENGINEER CIRCULAR 1165-2-218: U.S. ARMY CORPS OF ENGINEERS LEVEE SAFETY PROGRAM, p. 5 (June 16, 2023), https://www.publications.usace.army.mil/Portals/76/EC%201165-2-218_USACE%20Levee%20Safety%20Program_2024%2011%2019%20-%20Final.pdf.

⁵ Simone Fiaschi, Mead A. Allison, & Cathleen E. Jones, *Vertical Land Motion in Greater New Orleans: Insights into Underlying Drivers and Impact to Flood Protection Infrastructure*, SCIENCE ADVANCES (June 27, 2025), <https://www.science.org/doi/10.1126/sciadv.adt5046>.

are making plans for Mississippi River water as changing hydrologic conditions impact navigation and water availability. Of note is the explosive growth in hyperscale data centers for artificial intelligence throughout the country, especially in the Mississippi River main stem states. Please refer to the Appendix for a consolidated list of facilities. The siting of these massive data centers near the Mississippi River, many of which will draw massive and often undisclosed amounts of water from the Mississippi River Alluvial Aquifer, must be studied more closely. Due to the number and size of these facilities and the interconnected nature of the aquifer and main stem, there could be an impact on Mississippi River water levels. At this juncture, it is difficult to understand the extent of data center development and related water resource demands due to the unprecedented, extensive use of nondisclosure agreements between tech executives and public officials. Not only is the public largely unable to weigh in, but it also means these states are not coordinating with each other despite a shared reliance on the Mississippi River's water resources.

The water demands of data center operations and their associated power generation facilities also pose a threat to infrastructure within the MR&T. Excessive groundwater pumping can induce subsidence of vital infrastructure, as has already been demonstrated by Entergy's now closed Michoud facility in New Orleans.⁶ Moreover, many of these facilities are not subject to much federal oversight. Even in instances where a Section 404 application is filed, the scope of public notice and review does not reflect the scope of impacts these facilities will have on MR&T infrastructure, navigation, or water supply.⁷ That raises important questions that deserve more attention from the MRC. What will the impact of extracting so much groundwater from lands adjacent to the river be on federal levees and flood control structures? What about flood risk management from large-scale development (data centers and other industries) in formerly jurisdictional wetlands? These are questions that cannot be pushed aside. Once a problem arises, the damage could already be irreversible. The Army Corps does have other authorities and directives beyond regulatory programs that could be further explored and used to study and address these concerns. For example, it has the broad responsibility to manage real estate for infrastructure projects.⁸ In addition, Section 408 review gives the Army Corps a mechanism to ensure any third-party activities that could alter civil works projects do not impair a project's usefulness and are not against the public interest.⁹ The MRC should explore what authorities are available to adequately address data center impacts to MR&T projects.

Finally, and importantly, it is crucial that the MRC incorporates urgent water supply considerations into basic operating principles. Pressures for out-of-basin transfers, climate

⁶ *Assessment of Land Subsidence in New Orleans*, p. 5 (May 2023), https://nola.gov/nola/media/Stormwater/Assessment-of-Land-Subsidence_20230510.pdf.

⁷ The public notice for the North Louisiana Meta data center only mentions impacts to sixteen acres of jurisdictional wetlands due to the limited Clean Water Act review. Public Notice MVK-2024-740, U.S. Army Corps Engineers Vicksburg District (Dec. 12, 2024), https://www.mvk.usace.army.mil/Portals/58/docs/regulatory/publicnotices/Public%20Notice%20MVK-2024-740_Final.pdf?ver=mi1h5xECRBuJFigtHN9mqg%3d%3d. For information on another massive facility in Arkansas, see also Public Notice MVM-2024-216, U.S. Army Corps Engineers Memphis District, (Dec. 10, 2024), <https://www.mvm.usace.army.mil/Portals/51/MVM%202024-216.pdf>.

⁸ See e.g., Real Estate, U.S. Army Corps of Engineers New Orleans District, <https://www.mvn.usace.army.mil/About/Offices/Real-Estate/>.

⁹ U.S. Army Corps of Engineers, *Section 408 Program*, <https://www.usace.army.mil/Missions/Civil-Works/Section408/>.

change, and concerns from data centers and other industrial development are exacerbated by the fact that most states along the river do not comprehensively regulate or monitor water use. While the Army Corps does not have direct authority over water management, as it is traditionally a matter of state law, the national importance of the Mississippi River and the countless communities and uses it supports warrant more proactive and coordinated management. To that end, it would be beneficial to establish a process for state water agencies to share data with the MRC and Mississippi Valley Districts regarding surface water and groundwater use.

Water for public supply (domestic and municipal use) must be a primary consideration, as it is a foundational legal principle to water management in the United States.¹⁰ Community needs cannot simply be secondary to maintaining navigation channels and should be more thoroughly accounted for throughout operations, maintenance, and regulatory review. Persistent low water events and changing uses of the Lower Mississippi will continue to threaten public water supply near the mouth of the river up to New Orleans and even Baton Rouge.

A fragmented approach to Mississippi River management does not account for the needs of all who rely on it. How can the Army Corps fulfill its navigation, flood control, or environmental missions without knowing how much water is spoken for and what is available? How can conflicts between states over the river's water resources be better anticipated, avoided, and resolved? We understand there are no easy solutions to the issues presented today. However, the MRC, in its advisory role, must prepare to address the challenges that will shape the way communities and commerce utilize the Mississippi River. Thank you for the opportunity to provide the Commission with testimony. We are happy to answer any questions and provide additional information if desired.

Sincerely,

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Christopher Dalbom, Director
Tulane Institute on Water Resources Law & Policy

¹⁰ Connecticut v. Massachusetts, 282 U.S. 660 (1931).

Appendix: Hyperscale Data Centers in the Mississippi River Corridor*

(note this is not an exhaustive list and doesn't include smaller operations)

Louisiana

- Meta 'Hyperion' Richland Parish Data Center¹¹
 - Located in Richland Parish, LA (outside Monroe)
 - Cost – \$10 billion
 - Size – 4 million sq. ft (land area roughly the size of Manhattan)
 - Water will come from Mississippi River Alluvial Aquifer based on test wells
- Hut 8 West Feliciana Parish Data Center¹²
 - Located in West Feliciana Parish (outside Baton Rouge)
 - Cost – \$2.5 billion
 - Size – 900,000 sq. ft
 - Water source unknown, company plans to use closed-loop system

Mississippi

- Amazon AWS Madison County Data Center¹³
 - Madison County, MS (outside Jackson)
 - Cost – \$10 billion
 - Size – 1,700 acres
 - Water from Beattie's Bluff Wastewater Treatment Plant along Big Black River
- Compass Datacenters Meridian Data Center¹⁴
 - Meridian, MS
 - Cost – \$10 billion
 - Size – 2 million sq. ft facility
 - Water source unknown

Tennessee

- Meta Gallatin Data Center¹⁵
 - Gallatin, TN (outside Nashville)
 - Cost – \$1.5 billion

* Information surrounding project scope and potential water use / sourcing is not widely available due to the use of nondisclosure agreements and lack of state water regulations.

¹¹ <https://datacenters.atmeta.com/wp-content/uploads/2024/12/Metas-Richland-Parish-Data-Center.pdf> ;

<https://www.turnerconstruction.com/pages/richland-parish-data-center-resource-page>

¹² <https://www.datacenterdynamics.com/en/news/planned-hut-8-data-center-in-west-feliciana-parish-louisiana-gets-green-light/>

¹³ <https://www.datacenterdynamics.com/en/news/aws-confirmed-as-company-behind-10bn-mississippi-data-center-development/>; <https://www.clarionledger.com/story/business/2025/08/14/where-will-water-come-from-to-cool-data-centers-near-jackson-ms/85639209007/>

¹⁴ <https://www.datacenterdynamics.com/en/news/compass-datacenters-breaks-ground-on-10bn-campus-in-meridian-mississippi/>

¹⁵ https://datacenters.atmeta.com/wp-content/uploads/2025/02/Meta_s-Gallatin-Data-Center.pdf ;

<https://www.datacenterdynamics.com/en/news/meta-officially-launches-gallatin-data-center-campus-in-tennessee/>;

<https://www.gallatinutilities.com/water/water>

- Size – 1 million sq. ft facility / 800 acres
- Water from Gallatin Water Distribution System sourced from Old Hickory Lake
- Google Montgomery County Data Center¹⁶
 - Clarksville, TN
 - Opened in 2019
 - Water source unclear, located in Cumberland River watershed
- xAI “Memphis Supercluster”¹⁷
 - Memphis, TN
 - 750,000 sq. ft. facility (considered one of the largest supercomputers in the world)
 - Water from municipal drinking water supply
- xAI Whitehaven Data Center¹⁸
 - Located in Whitehaven/Memphis, TN
 - In planning stages
 - Size – 1 million sq. ft

Arkansas

- Google “Project Pyramid” Data Center¹⁹
 - West Memphis, AR
 - Cost – \$10 billion
 - Size – 600 acres? Or over 1000?
 - Water potentially from Mississippi River or MR Alluvial Aquifer

Missouri

- Meta Kansas City Data Center²⁰
 - Kansas City, MO
 - Cost – \$1 billion
 - Size – 1 million sq. ft
 - Water source unknown
- Google Kansas City Data Center²¹
 - Northland, Kansas City, MO

¹⁶ <https://datacenters.google/locations/montgomery-county-tennessee/>; <https://blog.google/feed/tennessee-watershed-health/>

¹⁷ <https://www.datacentermap.com/usa/tennessee/memphis/xai-memphis-supercluster/>
<https://www.protectouraquifer.org/issues/xai-supercomputer>

¹⁸ <https://www.datacenterdynamics.com/en/news/elon-musks-xai-buys-one-million-sq-ft-site-for-second-memphis-data-center/>; <https://www.datacentermap.com/usa/tennessee/memphis/5400-tulane-road/>
<https://www.datacenterdynamics.com/en/news/elon-musks-xai-buys-one-million-sq-ft-site-for-second-memphis-data-center/>; <https://www.datacentermap.com/usa/tennessee/memphis/5400-tulane-road/>

¹⁹ <https://www.datacentermap.com/usa/arkansas/west-memphis/google-west-memphis/>;
<https://arkadelphian.com/2025/07/25/are-data-centers-worth-the-resources-they-use/>

²⁰ <https://datacenters.atmeta.com/wp-content/uploads/2025/07/Meta-Kansas-City-Data-Center.pdf> ;
<https://www.kshb.com/news/local-news/meta-chooses-kansas-city-for-construction-of-800m-data-center>

²¹ <https://www.kshb.com/news/local-news/google-announces-1b-data-center-in-kansas-citys-northland>

- Cost – \$1 billion
- Currently in development
- Project Cumulus Data Center²² (WITHDRAWN 8/19/25)
 - St. Charles, MO
 - Size – 440 acres
 - Operator has not been released, only the contracting company
 - Water sourced from municipal water supply

Iowa

- Meta Altoona Data Center²³
 - Altoona, IA (outside Des Moines)
 - Cost – \$2.5 billion
 - Size – 5 million sq. ft
 - Water sourced from Jordan Aquifer (groundwater source for Altoona)
- Google Council Bluffs Data Center²⁴
 - Council Bluffs, IA (near Omaha on Missouri River)
 - Cost – \$6.8 billion
 - Has continued to expand since 2007
 - Size – 2.9 million sq. ft
 - Water source – likely Missouri River Basin
- Google Cedar Rapids Data Center²⁵
 - Cedar Rapids, IA
 - Under construction
 - Cost – \$576 million
 - Water from Cedar Rapids Water System (Cedar River)
- Microsoft Des Moines Data Centers²⁶
 - Des Moines, IA
 - 2 data centers currently under construction: Ginger West and Ginger East (estimated completion in 2028)

²² <https://www.ksdk.com/article/money/economy/energy/missouri-massive-data-center-st-charles-sective-power-water-worries-polluted-groundwater-protected-wetland/63-cdae3e73-efab-4c0c-9215-938d064188e3>

²³ https://datacenters.atmeta.com/wp-content/uploads/2025/02/Meta_s-Altoona-Data-Center.pdf; <https://www.desmoinesregister.com/story/news/local/altoona/2021/12/15/facebook-data-center-locations-meta-stock-altoona-site-largest-country/8899645002/>; <https://who13.com/news/iowa-news/how-much-water-do-iowa-data-centers-use/>

²⁴ <https://datacenters.google/locations/council-bluffs-iowa/>; <https://www.datacenters.com/google-council-bluffs-ia>; <https://www.thegazette.com/energy/google-will-spend-another-1b-on-council-bluffs-data-center-1-3m-for-river-restoration/>

²⁵ <https://www.kcrg.com/2025/05/30/google-holds-celebration-new-data-center-cedar-rapids/>; <https://www.thegazette.com/business/fast-start-to-cedar-rapids-data-center-projects/>; <https://www.kcrg.com/2025/04/17/concerns-expressed-over-water-usage-new-cedar-rapids-data-centers-leads-much-larger-questions/>

²⁶ <https://local.microsoft.com/communities/americas/greater-des-moines/>; <https://www.datacenters.com/microsoft-azure-des-moines>

- Size – 400,000 sq. ft facility
- Water from West Des Moines Water Works
- At least six Microsoft data center campuses in West Des Moines²⁷
- Apple Inc. Waukee IA Data Center²⁸
 - Waukee, IA (outside of Des Moines)
 - Cost –\$1.3 billion
 - Size – 2 million sq. ft facility
 - Water source unknown

Illinois

- Meta DeKalb Data Center²⁹
 - DeKalb, IL (outside Chicago)
 - Cost - \$1 billion
 - Size - 2.3 million sq. ft facility
 - Water from Kishwaukee Water Reclamation District
- Microsoft Chicagoland Data Centers³⁰
 - Northlake, IL (Chicago area)
 - Size – 700,000 sq. ft facility
 - Water source –Lake Michigan, and aquifers
 - Other data centers are being developed in the Chicago region, including Plano³¹

Wisconsin

- Amazon AWS Wanapa Campus³²
 - Oregon, WI (outside Madison)
 - Water source unknown
- Microsoft Mount Pleasant Data Center³³
 - Racine County, WI
 - Under construction
 - Cost – \$3.3 billion

²⁷ <https://www.wpr.org/news/microsoft-data-center-iowa-wisconsin-expect#:~:text=Microsoft%20opened%20its%20first%20data%20center%20campus,over%20600%20acres%20in%20West%20Des%20Moines>

²⁸ <https://dgtlinfra.com/apple-iowa-data-center-campus/>

²⁹ <https://www.chicagotribune.com/2023/11/29/meta-turns-on-the-power-for-1-billion-dekalb-data-center/>;
<https://www.illinois.gov/news/release.html?releaseid=21759>

³⁰ <https://local.microsoft.com/communities/americas/illinois/>; <https://www.datacenters.com/microsoft-azure-north-central-us-illinois>; <https://insideclimatenews.org/news/16062025/illinois-data-centers-water-use/#:~:text=Last%20year%2C%20Equinix%20Inc.,state%20agencies%20to%20develop%20regulations.>

³¹ [https://www.datacenterdynamics.com/en/news/microsoft-details-plans-for-cherry-valley-illinois-data-center-campus/#:~:text=Microsoft%20is%20also%20developing%20a,sq%20ft%20\(14%2C000%20sqm\)](https://www.datacenterdynamics.com/en/news/microsoft-details-plans-for-cherry-valley-illinois-data-center-campus/#:~:text=Microsoft%20is%20also%20developing%20a,sq%20ft%20(14%2C000%20sqm))

³² <https://www.datacenters.com/amazon-aws-wanapa-campus>

³³ <https://mkeregion.com/news/2025/03/03/regional-infrastructure/data-centers-open-door-for-growth-and-construction-in-wisconsin/#:~:text=The%20most%20outstanding%20project%20is,U.S.%20Department%20of%20Energy%20reported;https://www.wpr.org/news/microsoft-new-technology-save-water-mount-pleasant-data-center>

- Plans to use a closed-loop water system
- Vantage Port Washington Data Center³⁴
 - Port Washington, WI
 - In early development stages
 - Potential to cover 1,900 acres

Minnesota

- Meta Rosemount Data Center³⁵
 - University of Minnesota Outreach, Research & Education Park in Rosemount (outside Minneapolis, MN)
 - Cost – \$800 million
 - Size – 715,000 sq. ft facility on 280 acres
 - Water from Rosemount groundwater system

³⁴ <https://www.datacenterdynamics.com/en/news/vantage-explores-data-center-development-on-cloverleaf-site-in-port-washington-wisconsin/>

³⁵ <https://datacenters.atmeta.com/wp-content/uploads/2025/02/Metas-Rosemount-Data-Center.pdf>;
<https://www.mprnews.org/story/2024/03/14/meta-to-open-data-center-in-rosemount-in-2026>;
<https://www.govtech.com/products/minnesota-data-center-debate-turns-to-water-consumption>