

Prepared Statement of Joel Paulsen

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“A Non-Federal Sponsor’s Perspective on the U.S. Army Corps of Engineers and the Water Resources Development Act”

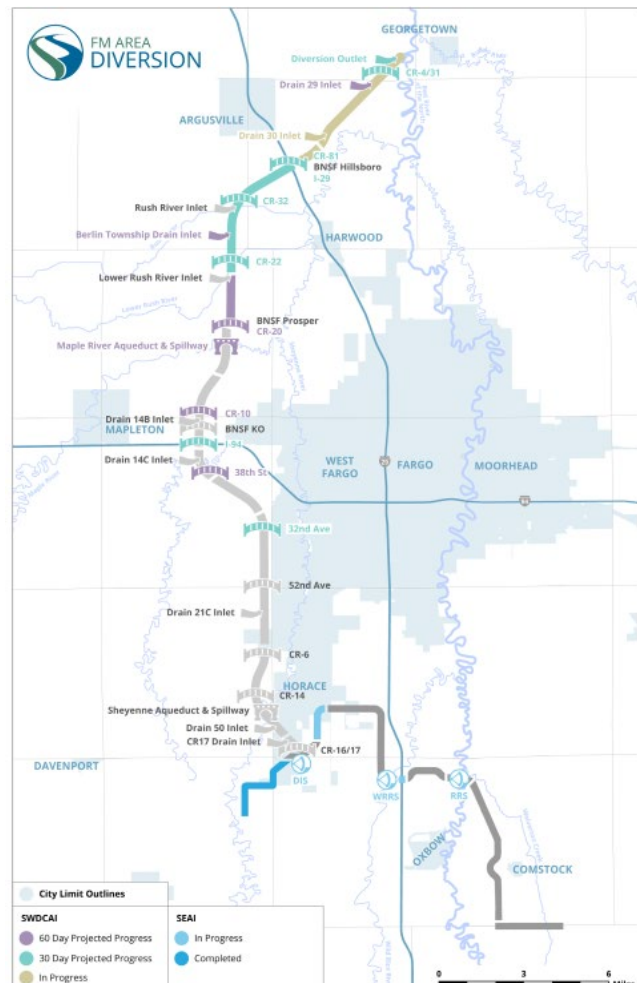
Before the U.S. Senate Committee on Environment and Public Works

Thursday, July 20, 2023

Good morning, Chairman Carper, Ranking Member Capito and Members of the Senate Committee on Environment and Public Works. I am Joel Paulsen, Executive Director of the Metro Flood Diversion Authority in the Red River Valley of North Dakota and Minnesota. The Metro Flood Diversion Authority is a permanent North Dakota political subdivision that is cooperatively implementing the Fargo-Moorhead Area Diversion comprehensive project with the U.S. Army Corps of Engineers. The MFDA works in partnership with the Red River Valley Alliance in a public-private partnership as well as the City of Fargo, City of Moorhead, Cass County, Clay County and the Cass County Joint Water Resource District. I want to thank you, and especially Senator Cramer, for inviting me to testify before you today.

You may not know that North Dakota is second only to the state of Louisiana when it comes to inland flood risk in the U.S. The Metro Flood Diversion Authority has been tasked with protecting the people, homes, businesses and property of the Fargo, North Dakota, and Moorhead, Minnesota, community from the flooding of the Red River, which flows north to Canada. The risk of a serious flood continues to grow and, as a result, we sought a permanent solution in conjunction with the Army Corps of Engineers through the construction of the Fargo-Moorhead Area Diversion – or the Fargo-Moorhead Metropolitan Area Flood Risk Management Project, as it is formally known. The \$3.2 billion project began construction in 2017 and is scheduled for substantial completion by 2027. It will provide permanent, reliable flood protection for 260,000 residents and \$19 billion of property value in our metropolitan area.

Plans for the project started after a terrible and record-setting 1997 flood that decimated our sister city to the north, Grand Forks. It



resulted in the largest peacetime evacuation of a community in the United States until being surpassed by New Orleans during Hurricane Katrina. The river crested at nearly 40 feet in Fargo and caused \$3.5 billion in damages within the Red River Valley. Unfortunately, that record was broken in 2009, with the river cresting at 40.82 feet, and it became apparent that a permanent flood protection project needed to be implemented in Fargo-Moorhead to guarantee the viability of our community long term. With seven of the top-10 flood levels of record having occurred since 1997, the ability to implement a resiliency project as quickly as possible was paramount.

Without a working project, flooding will continue to generate an average annual economic loss of just over \$1 billion in business output. During years of flooding, approximately 9,500 jobs are impacted with an average income loss of \$48,000 per employee. When combined with the indirect and induced impacts, flooding generates over \$1.6 billion in business output losses and affects nearly 16,000 jobs. Additionally, business activity losses (economic output and employment) reduce overall tax collections by approximately \$114 million.

To combat this dire situation and provide protection against 100-year flood events and fightable protection for up to 500-year flood events, the project will add water control structures and a 30-mile stormwater diversion channel designed to divert water around the Fargo-Moorhead metropolitan area during such extreme flood events. The FM Area Diversion also includes protections within the cities of Fargo and Moorhead, which includes more than 50 miles of levees, and 27 stormwater lift stations. Much of the in-town infrastructure has already been built, and it helped minimize flood damage in our community during the more routine 2023 flood season.

Our project has faced many of the same challenges as others around the nation seeking to build a multi-billion flood control project with the U.S. Army Corps of Engineers Civil Works Program. We all know that the conventional process takes too long and costs too much. Congressional authorization, federal studies, annual appropriations, and funding shortfalls led us to believe that the completion of this project could potentially take decades. Given that flooding is an annual threat to our community each and every spring, we did not believe we could wait out the traditional process and we wanted to find a way to deliver the project quickly and pay over time versus paying over time and then delivering.

As it turns out, the 2014 Water Resources Reform and Development Act provided us with an exciting but untested alternative. While we worked through the steps of obtaining annual federal funding, we worked with members of this committee to create a new “public-private partnership” program for the Corps of Engineers. It’s the first of its kind. This allows us to allocate risk between the Corps of Engineers, the P3 developer and the non-Federal sponsor to build a project very fast and allow us to pay over time with both private and public funding.

Importantly, this program allowed the non-Federal sponsor to be in charge of overall program delivery, inherently transferring much of the delivery risk and incentivizing cost-savings during project construction. Overall, the Corps estimates that utilizing a P3 will save \$330 million and 10 years in construction costs and time, while yielding a more than 400% return on the Federal investment.

Because our community is under the constant threat of devastating floods, local ballot measures have already been overwhelmingly passed to create funding streams dedicated to flood fighting. We began meeting with the Corps, and it was clear that both sides saw the opportunity to pursue an innovative delivery method, capitalizing on the strong partnership built during the project study phase to jointly deliver a flood protection solution using a public-private partnership. Our team jumped in to tailor the delivery approach, applying an innovative, first-of-its-kind funding and implementation model to develop scenarios and economic options to keep the project on track.

Our funding innovation only began with our participation as the U.S. Army Corps of Engineers' first non-federal P3 partner. We've continued to look for additional avenues to expedite the project and make our local dedicated tax dollars stretch further. In fact, we have turned the Federal funding percentage for traditional flood protection projects upside down, resulting in a 23% Federal share and a 77% non-federal share.

We were also thrilled to find other federal partners who offered solutions that we could incorporate into our financing plan, namely the U.S. Department of Transportation and the Environmental Protection Agency. These partnerships resulted in \$296 million in Private Activity Bonds allocated through the DOT, which will assist with the project's bridge components. An additional \$569 million in financing came via the EPA in the form of a Water Infrastructure Financing and Innovation, or WIFIA, loan – one of the largest in history.



I believe you'll agree that our flood diversion initiative is among the most innovative Corps projects in the nation. In addition to funding and financing from three federal agencies (the Corps, the U.S. Department of Transportation and the EPA), we also secured funding from local sales tax revenue, a State Revolving Fund (SRF) loan from the North Dakota Public Finance Agency, grant funds from both North Dakota and Minnesota, and, of course, private-sector financing from our P3 partner, the Red River Valley Alliance. These funding and financing partnerships have allowed the project to move forward, take a decade off the completion date, and lock in low interest rates prior to the current bout of inflation.

Beyond how the project was paid for, we've worked hard to ensure a technically superior approach to protect our community exceeding the so-called "100-year" flood status, which no longer serves as a fair barometer for the frequency of major flooding in our region. We hired Jacobs, an AE firm with international experience in public-private-partnerships, to help lead us through the development of the first P3 deal used for a flood risk management project in North America.

There are so many local and federal leaders to thank that I won't have time to list everyone, but I must take a moment to thank our federal partners, including our fantastic Congressional

delegations in North Dakota and Minnesota. Everyone's tireless efforts helped us to navigate many challenges while pushing through numerous political and administrative obstacles to help us eventually reach full funding. It means the world to us as we continue our role as the economic driver of our region – and will provide the certainty for new businesses to locate in our area with confidence, providing countless new opportunities for our population.

I also want to thank all four Senators for their votes in favor of the Bipartisan Infrastructure Law. The historic funding levels for the Corps of Engineers in this bill directly led to a \$437 million

allocation to complete the federal portion of our project. This will allow us to move forward at full speed and with certainty toward being fully operational and ready to fight major flood events from 2027 onward.

It is important to thank the Corps for their dedication to making the first P3 pilot a success, but much more so for their commitment to protecting our community. We cannot thrive with the constant threats of flooding, and we were fortunate to have many wonderful Corps leaders that fought for the P3 program and provide us with annual funding. We are also grateful for many talented and dedicated staff that work in the Corps' St. Paul Office. Specifically, Terry Williams and Aaron Snyder for their foresight, innovation, and relentless pursuit and belief in the P3 concept.

As we are the very first Corps P3 nationwide, there have been countless small steps and learning opportunities along the way. While we cannot address everything today, I want the Committee to know that our Board and I are always happy to discuss our project and experiences to perfect the federal P3 process for future projects. That said, I would like to address several high-level points that we believe this Committee should consider as it begins developing the next Water Resources Development Act and as the Corps continues to utilize P3s and other innovative delivery methods in the future.

First, we encourage the Corps to open their new P3 opportunities with a "users guide" – a broad lessons-learned document to set the tone and expectations for non-federal sponsors. Among other topics, a document could discuss the Project Partnership Agreement (PPA) negotiations and methods to accelerate funding.

- Understanding that a project will be utilizing a P3 is easier if done earlier in the process, and even during feasibility studies.



- There must be a clear pathway to secure the required environmental permits and approvals to reduce uncertainty and risk for bidders, noting that each project will have its own unique pathway. This also would allow for greater flexibility regarding land use and right-of-way.
- There must be clear performance criteria. The hundreds of hours spent in one-on-one meetings between the Metro Flood Diversion Authority and private sector finance proposers fielding questions and concerns enabled everyone to clarify the performance criteria and to get comfortable with pricing the risk.
 - The Corps significantly changed its approach to engineering review, ensuring that we could meet the rigorous design and delivery schedule and we are very pleased with how this has worked to date.
 - They also streamlined their real estate process, which enabled us to get all the lands necessary, consistent with all Federal laws, but saved tremendous time and resources.
- The role of the Corps in an innovative delivery model like our locally-delivered P3 is not a traditional one. Corps staff are understandably accustomed to planning, design, construction and permitting in a certain way. A P3 structure is a novice approach and, accordingly, there were times when both sides viewed the lines as requiring clarification.
- Critical to a successful P3 procurement is the ability to identify a viable financial model very early in the process, and to be able to provide P3 private-sector bidders with confidence that the funds will be available as modeled.

The final point to emphasize is education, education, education. Ensuring that all individuals, regardless of role or position, understand both the P3 delivery model and federal requisites as well as how substantially each may differ from their previous experience and projects will avoid issues surfaced by well-intentioned people who may not fully appreciate or understand the requirements. This is an ongoing success factor and applies during all phases of the project. Ultimately, the Corps trusted us, they gave up control but maintained the integrity of the project. It's a partnership and example of how projects can and should be delivered.

Thank you again Chairman Carper, Ranking Member Capito and Members of the Committee for the opportunity to testify. I look forward to your questions.