David Whitaker, Esq. Director Irvin Corley, Jr. Executive Policy Manager Marcell R. Todd, Jr. Director, City Planning Commission Janese Chapman Director, Historic Designation Advisory Board

John Alexander Roland Amarteifio Megha Bamola LaKisha Barclift, Esq. Paige Blessman M. Rory Bolger, Ph.D., FAICP Eric Fazzini, AICP Willene Green Christopher Gulock, AICP

# **City of Detroit** CITY COUNCIL

LEGISLATIVE POLICY DIVISION 208 Coleman A. Young Municipal Center Detroit, Michigan 48226 Phone: (313) 224-4946 Fax: (313) 224-4336

**Derrick Headd** Marcel Hurt, Esq. **Kimani Jeffrey** Phillip Keller, Esq. **Edward King Kelsey Maas Jamie Murphy** Analine Powers, Ph.D. W. Akilah Redmond Laurie Anne Sabatini **Rebecca Savage** Sabrina Shockley **Renee Short Floyd Stanley** Thomas Stephens, Esq. **Timarie Szwed Theresa Thomas** Ashley A. Wilson

TO:	The Detroit City Council
FROM:	David Whitaker, Director
DATE:	July 6, 2023
RE:	Oversight of Jefferson-Chalmers Water project

The Legislative Policy Division (LPD) has been requested by Council Member Coleman A. Young, II to provide a comprehensive report on the Jefferson-Chalmers Project and indicate which City of Detroit divisions and departments will have oversight of the project. Additionally, Council Member Young II would like to know what role the United States Army Corps of Engineers will play in the development of the project. Herewith is the LPD response.

The Jefferson-Chalmers Water Project – is a community-based, community-driven and community-supported initiative to find solutions to the interconnected water resource management challenges in the Jefferson-Chalmers neighborhood which is surrounded by natural and enclosed water assets.<sup>1</sup> The community is bordered by Fox Creek/Alter Road to the east, Conner Creek/Clairpointe Avenue to the west, the Detroit River to the south, and East Jefferson Avenue to the north. The community features a unique design as it is the only place in the City of Detroit that has many of its residential properties directly abutting open, navigable surface water due to its location along canals.

<sup>&</sup>lt;sup>1</sup> <u>https://jeffersonchalmerswaterproject.org/index1.html</u>

The Jefferson-Chalmers Water Project is structured around three goals: to keep, sewage out of basements and canals, stormwater out of the sewer system, and the Great Lakes out of the neighborhood. On June 24, 2021, the Jefferson-Chalmers Water Project published "Toward Better Water Resource Management in the Jefferson-Chalmers Community."<sup>2</sup> The 72-page white paper authored by neighborhood resident, Jay C. Juergensen, aimed to explain the history of poor water resource management in the community, why the community is so susceptible to destructive flooding, and provide technical details to inform residents and stakeholders on the types of solutions that are needed to address the issues. The white paper was published just before the disastrous June 2021 storms that caused significant surface flooding and basement backups throughout Southeast Michigan.

An Independent Assessment of Extreme Rainfall Events authored by AECOM (a national consulting firm) in 2022, concluded that the intense rainfall exceeded the capacity of the wastewater system and resulted in unavoidable surface flooding and basement backups.<sup>3</sup> The report also stated that operational problems at pumping stations during the storm likely exacerbated flooding and backups. These problems included electrical supply issues at the Freud Pumping Station that prevented all of the pumps from operating, delayed pump starts at the Conner Creek Pumping Station, and all pumps at the Bluehill Pumping Station not operating during the storms. The report concluded that even if all the pumping stations were fully operational the risk of flooding and basement backups would not have been meaningfully reduced. The report acknowledged the Jefferson-Chalmers Neighborhood experienced numerous basement backups during the July 16 storm despite the lack of observed surface flooding at the Conner Creek and Freud Pumping Stations.

On March 16, 2023, Mr. Juergensen provided a detailed presentation on behalf of the Jefferson-Chalmers Water Project to the City Planning Commission to provide background on the ongoing water management issues.<sup>4</sup> During the presentation, Mr. Juergensen presented information related to the Federal Emergency Management Agency's (FEMA) designation of Jefferson-Chalmers in a floodplain that, along with new Flood Insurance Rate Maps (FIRM), requires property owners to purchase flood insurance. The presentation also included a recommendation for engineering solutions to the water infrastructure issues in the community as well as multiple funding sources that could be pursued from the Federal, State, and City governments. (See tables below.) After the presentation the City Planning Commission voted to recommend that the City Council schedule an informational presentation at its formal session as well as work to identify the necessary projects and funds to aid in removing the community from the floodplain and ease the burden on residents. On May 16, 2023, the Detroit City Council received an informational presentation from Mr. Juergensen similar to the one presented to the City Planning Commission.<sup>5</sup>

<sup>&</sup>lt;sup>2</sup><u>https://jeffersonchalmerswaterproject.org/331\_m\_ENTIRE\_TowardBetterWaterResourceManagement\_06.21.21.p</u> <u>df</u>

<sup>&</sup>lt;sup>3</sup> <u>https://www.glwater.org/wp-content/uploads/2022/06/Executive-Summary-on-Assessment-of-Extreme-Rainfall-Events-in-2021.pdf</u>

<sup>&</sup>lt;sup>4</sup> <u>https://reflect-detroit-vod.cablecast.tv/CablecastPublicSite/show/12317?site=5</u>

<sup>&</sup>lt;sup>5</sup> <u>http://detroit-vod.cablecast.tv/CablecastPublicSite/show/12510?site=1</u>

Pr	Proposed Use of Funds			
	B2. Expand Habitat and Marshland in Riverfront Parks to Hold and Pre-Treat Stormwater Flood Protection and Shoreline Restoration	21,805,140.50	23,388,079.00	
19	C1. Fox Creek and Linked Canals Seawalls	9,378,585.48	11,462,715.59	
	C6. Seawall Improvements in Bayview Yacht Club or Topographical Changes near Bay View Yacht Club		5,922,246.65	
То	tals	33,421,619.49	40,773,041.24	

Note: Numbers reference Engineering Report noted earlier.

Proposed Sources of Funds					
HUD – CDBG-DR	10,000,000.00				
EPA – GLRI Habitat Restoration	9,250,000.00				
City of Detroit	1,250,000.00				
Wayne County Contribution	500.000.00				
State of Michigan	20,000,000.00				
Total		41,000,000.00			

Proposed Flood Protection Project - Jefferson-Chalmers Water Project<sup>6</sup>

#### **City of Detroit Departments**

Due to the interconnected nature of water resources and infrastructure, the responsibility for addressing issues in Jefferson-Chalmers is spread throughout the City, County, and State jurisdictions. Within the City of Detroit, the Buildings Safety Engineering and Environmental Department (BSEED), Detroit Water and Sewerage Department (DWSD), Detroit Building Authority (DBA), Housing and Revitalization Department (HRD), and Planning and Development Department (PDD) would all play a role in identifying, funding, and implementing solutions.

#### Buildings, Safety Engineering and Environment Department (BSEED)

BSEED is responsible for floodplain management and ensuring that the city's Shoreline Protection Ordinance is being implemented as well as inspecting seawalls of all the riverfront's commercial properties for compliance with city standards.<sup>7</sup>

#### Detroit Water and Sewerage Department (DWSD)

DWSD delivers clean water and collects sanitary sewage and stormwater for the City of Detroit. The department is also the steward of the Federal Emergency Management Agency's (FEMA) Building Resilient Infrastructure & Communities (BRIC) grant which "supports states, local communities, tribes and territories as they undertake hazard mitigation projects, reducing the risks from disasters and natural hazards."<sup>8</sup> The City operates a combined sewage overflow (CSO) system that collects rainwater runoff, domestic sewage and industrial waste water into one pipe and therefore the issues of stormwater management and sewage are interconnected.

<sup>&</sup>lt;sup>6</sup> <u>https://jeffersonchalmerswaterproject.org/index1.html</u>

<sup>&</sup>lt;sup>7</sup> <u>https://detroitmi.gov/departments/buildings-safety-engineering-and-environmental-department/bseed-divisions/environmental-affairs/floodplain</u>

https://detroitmi.gov/departments/buildings-safety-engineering-and-environmental-department/bseeddivisions/property-maintenance/maintaining-detroits-riverfront

<sup>&</sup>lt;sup>8</sup> <u>https://www.fema.gov/grants/mitigation/building-resilient-infrastructure-communities/after-apply/fy22-status</u>

## Detroit Building Authority (DBA)

The DBA is responsible for managing large-scale capital construction projects and space planning of city-owned facilities. The DBA was listed as the project manager for facilitating a flood mitigation study for the Jefferson-Chalmers area and may therefore be a responsible party to the contents and recommendation of flood mitigation in the community.<sup>9</sup>

## Housing and Revitalization Department (HRD)

HRD was one of the many City Departments listed in the U.S. Army Corp of Engineers' "Lake St. Clair Flood Risk Reduction Study for the Jefferson-Chalmers Neighborhood," which was authored in July 2022. The Department also is responsible for distributing the city's allocation of Community Development Block Grant Disaster Recovery (CDBG-DR) funds. The \$57.5 million in CDBG-DR funds are meant to help Detroit residents recover from the 2021 floods that devastated communities and help build resilient systems and infrastructure to combat climate change.<sup>10</sup> The department originally planned to allocate funds to construct protective infrastructure in Jefferson-Chalmers to prevent future flooding, but that activity proposal was suspended and funds were pulled from the HUD approved CDBG-DR action plan due to overwhelming opposition from the community; the funds are expected to be allocated at a later date.

## Planning and Development Department (PDD)

PDD is the city's Planning and Development Department and is an instrumental partner in all development throughout the City. According to the City Charter PDD like the CPC has purview over all Development Matters, which is defined as follows in Section 6-204 of the Charter:

The term "development matters" as used in the Charter includes: The master plan for social, economic and physical development and conservation; the annual capital agenda and capital budget; any development or renewal project on or affecting public real property or public interests in real property or requiring public assistance; proposed ordinances for the regulation of development or conservation; proposals for the demolition, disposition or relinquishment of, or encroachment upon, public real property or public interests in real property; and any other items added by ordinance.

In April 2019, the Department published a Neighborhood Framework Plan for the Jefferson-Chalmers community.<sup>11</sup> This plan was the product of a community-based planning process that set out to produce a clear and achievable plan of action for the community. The department engaged with residents and stakeholders to develop recommendations for neighborhood projects including, rejuvenating retail, stabilizing housing, and improving walkability and sustainability.

# **State and Federal Departments**

Outside of the City of Detroit, the Great Lakes Water Authority (GLWA), Michigan Department of Environment, Great Lakes, and Energy (EGLE), United States Army Corps of Engineers (USACE), United States Department of Housing and Urban Development (HUD), United States

<sup>&</sup>lt;sup>9</sup> <u>https://detroitmi.gov/sites/detroitmi.localhost/files/2023-02/Flood%20Mitigation%20Study%20-</u> %20Funding%20Agreement.pdf

<sup>&</sup>lt;sup>10</sup> <u>https://detroitmi.gov/departments/housing-and-revitalization-department/disaster-recovery</u>

<sup>&</sup>lt;sup>11</sup> https://detroitmi.gov/sites/detroitmi.localhost/files/2019-05/Jefferson%20Chalmers Final%20Book.pdf

Environmental Protection Agency (EPA), and the Federal Emergency Management Agency (FEMA) are departments and agencies which have jurisdiction over some aspect of water resources and infrastructure in the Jefferson-Chalmers Community. These stakeholders also control the purse strings for a significant amount of public-funding-related infrastructure improvement in the City of Detroit.

The USACE as one of the world's largest public engineering, design and construction management agencies and the author of the Lake St Clair Flood Reduction Study for the Jefferson-Chalmers Neighborhood, plays a vital role in ensuring the viability of the solutions presented to City Council by the Jefferson-Chalmers Water Project. In addition to their technical expertise with floodplain management, the Corps has an office based in the City of Detroit and a great deal of familiarity with the water management issues that continue to plague the City.

#### Conclusion

Above we have provided the various City Departments and agencies with purview over one or more aspects of the Jefferson-Chalmers Water Project. Your Honorable Body may want to consider inviting the agencies and City of Detroit Departments named in this report to appear before the Council to update the Members and the public on their efforts to address the floodplain designation in the Jefferson-Chalmers Neighborhood. Additionally, City Planning Commission (CPC) staff has been providing support to the Jefferson-Chalmers Water Project since its inception and has continued to aid with the research, advocacy, and support of their efforts since the Commission elected to support the project out of its ongoing concern for climate change, stormwater management and capital projects addressing both. Should the Council deem it appropriate, CPC staff is prepared to play a more particular role should the Council so desire.

If we can be of any further assistance, please call upon us.