DEARBORN ECONOMIC DEVELOPMENT

CITY OF DEARBORN

CDBG-DR DISASTER RECOVERY GRANT

Draft 2nd SUBSTANTIAL AMENDMENT TO CDBG-DR ACTION PLAN AND UNMET NEEDS ASSESSMENT

SUBMITTED BY THE CITY OF DEARBORN
ECONOMIC DEVELOPMENT DEPARTMENT
April 4, 2025

SUMMARY OF CHANGES

This 2nd Substantial Amendment to the City of Dearborn's CDBG-DR Revised Action Plan and Unmet Needs Assessment reflect changes to the budget allocation with the cancellation of two activities. Both the Disaster Relief Supplemental Appropriations Act of 2022 (Pub. L. 117-43) approved September 30, 2021 and the Continuing Appropriations Act 2023 (Pub. L. 117-180) approved September 30, 2022 makes available CDBG-DR funding for necessary expenses for activities authorized under Title I of the Housing and Community Development Act of 1974 (42 U.S.C. 5301 *et seq.*) (HCDA) related to disaster relief, long-term recovery, restoration of infrastructure and housing, economic revitalization, and mitigation in the "most impacted and distressed" (MID) areas resulting from a qualifying major disaster in 2021 or 2022.

The proposed new changes are reflected in following sections of this 2nd Substantial Amendment

- Amendment Changes to the Action Plan
- Unmet Needs Assessment
- Proposed Substantial Amendment CDBG-DR Projects and Descriptions
- Dearborn CDBG-DR Mitigation Set Aside Plan
- Preparedness, Mitigation, and Resilience

The following activities were deleted as follows:

- Salina Green Schoolyards Planning
- Salina Green Schoolyards Project

The following activity budgets were increased:

- Green Infrastructure Planning
- Green Infrastructure Project

Dearborn Public Schools (DPS) has timeline constraints with project planning and construction for the nature playscape so they have declined to use CDBG-DR funding in order to meet other deadlines for the Salina Green School Yards Project. They had to reevaluate their current position with commitments to other funders of the project. In efforts to find another viable project, we believe the best solution and route to take would be to identify a section of DPS 's new projects which call for the installation of rain gardens and trees and add this as an additional rain garden project/site under the DR Rain Garden Program. The new project can be incorporated in the DR Rain Garden Program, which is being administered by the Friends of the Rouge organization.

The Salina Green Schoolyards Planning Activity was cancelled and the funding amount of $25,000 was moved to the Green Infrastructure Planning Activity budget. The Salina Green Schoolyards Project was cancelled and the $280,000 in funding was moved to the Green Infrastructure Project budget.

Amendment Changes to the Action Plan

Table #1 below identifies all the changes, additions, and/or deletions (amendments) made to the CDBG-DR Action Plan and Unmet Needs Assessment submitted in April 2023.

Table 1: Amendment Changes to CDBG-DR Action Plan

Section	Change, Additions, Deletion
Unmet Needs Assessment: Summary of Findings Page 31 of Action Plan	1. Deleted Salina Green Schoolyard Project from narrative
Planning Activities Table 2: Original and Amended Planning Budgets Page 54 – 55 of Action Plan	1. Amended CDBG-DR Planning table budget amounts to: • Green Infrastructure - $225,000 (added $25,000) • Salina Green Schoolyard - $0 (deleted $25,000)
Planning Activities Descriptions Page 63 – 64 of Action Plan	2. Deleted Green Schoolyard: Salina Schools Project Narrative
Table 3 Dearborn Proposed CDBG-DR Projects Budget Page 66 – 67 of Action Plan	1. Added $25,000 Green Infrastructure Planning 2. Deleted $25,000 from Salina Green Schoolyards Project Planning 3. Added $280,000 to Green Infrastructure Project 4. Deleted $280,000 from Salina Green Schoolyards Project
Dearborn CDBG -DR Mitigation Set Aside Plan Page 69 of Action Plan	1. Deleted Salina Green Schoolyard Project from narrative.
Table 4 Dearborn CDBG -DR Mitigation Set Aside Proposed Project Table Pages 70 of Action Plan	2. Added $280,000 to Green Infrastructure budget 3.. Deleted $280,000 from Salina Green Schoolyard budget.
Pages 73 – 74 of Action Plan	4. Deleted Dearborn Green Schoolyard: Salina Schools project description.

Preparedness, Mitigation and Resiliency: Funding Feasible, Cost-Effective Measures Pages 76- 77 of Action Plan	1. Deleted Green Schoolyard: Salina Schools Project from the narrative.
Promote Sound, Sustainable Long-Term Recovery and Resilience Planning Page 79 of Action Plan	2. Deleted Green Schoolyard: Salina Schools Project from the narrative.

Executive Summary

Overview

The U.S. Department of Housing and Urban Development (HUD) has allocated the City of Dearborn $27,005,000 in Community Development Block Grant – Disaster Recovery (CDBG-DR) grant funds, as a result of the 2021 flooding disaster. These CDBG-DR funds are to be utilized to support long-term recovery and mitigation efforts following severe storms and flooding. The Dearborn Economic Development Department (EDD) will administer the CDBG-DR funding on behalf of the City of Dearborn. The CDBG-DR funding is designed to address the needs that remain after all other assistance has been exhausted. This plan details how funds will be allocated to address the remaining unmet needs in Dearborn due to the 2021 flooding disaster.

To meet disaster recovery needs, the statutes making CDBG-DR funds available have imposed additional requirements and authorized HUD to modify the rules that apply to the annual CDBG program to enhance flexibility and allow for a quicker recovery. In March 2022, HUD allocated the $16.3M in CDBG-DR to the City of Dearborn from the Disaster Relief Supplemental Appropriations Act of 2022 for major disasters occurring in 2021 under FEMA (Federal Emergency Management Agency) disaster No. 4607 through Federal Register Notice (FRN) FR-6326-N-01 Public Law 117-43[1] made on May 24, 2022. In January 2023, HUD allocated another $10.6M in CDBG-DR funds to the City of Dearborn through The Continuing Appropriations Act, 2023 through (FRN) FR-6368-N-01 Public Law 117-180[2] made on January 18, 2023 (These CDBG-DR funds are for necessary expenses for activities authorized under Title I of the Housing and Community Development Act of 1974 (42 United States Code [U.S.C.] 5301 et seq.)[3] (HCDA) related to disaster relief, long-term recovery, restoration of infrastructure and housing, economic revitalization, and mitigation in the "most impacted and

[1] Federal Register Notice (FRN) FR-6326-N-01. Retrieved from https://www.govinfo.gov/content/pkg/FR-2022-05-24/pdf/2022-10969.pdf

[2] Federal Register Notice (FRN) FR-6368-N-01. Retrieved from https://www.govinfo.gov/content/pkg/FR-2023-01-18/pdf/2023-00721.pdf

[3] Title I of the Housing and Community Development Act of 1974 (42 United States Code [U.S.C] 5301 et seq.) https://www.govinfo.gov/content/pkg/USCODE-2010-title42/html/USCODE-2010-title42-chap69-sec5301.htm

distressed" (MID) areas resulting from a qualifying major disaster in 2021. Based on review of the impacts from the eligible disasters, and estimates of unmet need, HUD has identified the entire City of Dearborn as the MID area.

Unmet Needs Assessment

Background

Additionally, the infrastructure projects that are proposed later in this Action Plan will be the most cost effective and will create the biggest impact for homeowners and property owners in the most impacted and distressed areas of the City. Further, these infrastructure projects will provide the most mitigation for stormwater runoff to prevent flooding with two main approaches: 1) expansion of the stormwater system capacity; and 2) delay of stormwater into the stormwater system.

The other proposed CDBG-DR mitigation projects are: 1) green infrastructure projects; 2) rain garden installation in parks, large right of ways, and City-owned lots; and 3) tree planting in parks, large right of ways, and City-owned lots.

The final proposed CDBG-DR projects include Flood Kits for Dearborn Fire Dept. The Dearborn Fire Department is proposing to procure and warehouse, as a flooding response readiness measure, an inventory of flooding response kits to aid residents afflicted by flooding. These kits would be deployed as part of flooding response for events resulting in property damage or other hazards to the health of residents in their homes or businesses. They would consist of gloves, cleaning supplies, and other essentials that would aid individuals and families in their response to flooding at their properties as well as supporting City-led volunteer or first-responder flooding recovery actions in the immediate aftermath of a flooding event. The Dearborn Fire Dept. are proposing a modest allocation of $150K toward the procurement of kits which would be warehoused and deployed by the Dearborn Fire Department.

The proposed infrastructure projects in collaboration with the other CDBG-DR mitigation projects will reduce the overall amount of stormwater runoff from entering the stormwater system when heavy rain and flooding events occur. Most of these identified and proposed CDBG-DR projects will be located in the most impacted and distressed flooding areas of northeast and southeast sections in Dearborn. These are also the City's CDBG low/moderate income target areas for the purposes of this Action Plan. The Oakwood Blvd Infrastructure Project will occur in Dearborn's westside and is still in the designated MID area.

While the findings and conclusions of the City's sewer and stormwater study is still two years away, we are confident that our proposed CDBG-DR projects will help mitigate flood damage as the City works on a stormwater mitigation strategy with short-and-long-term goals. The proposed CDBG-DR infrastructure project that consist of the rehabilitation of the Colson Palmer stormwater line will alone lessen the impact of flooding for a minimum of 5,623 residential parcels, which encompass a total of 25,580 residents and 24% of Dearborn's overall population.

Based on the HUD FEMA IA data, this infrastructure project will be located in the northeast section of Dearborn, which is the largest identified MID area of the June 2021 flooding event as well as the CDBG low/moderate income areas of the City. Our proposed projects for green infrastructure, rain gardens, tree planting, grew out of strategies from the 2018 Dearborn Stormwater Management Toolkit.

Proposed Substantial Amendment CDBG-DR Projects and Descriptions

The FRN FR-6326-N-01 and FRN FR-6368-N-01 states CDBG–DR funds are provided for necessary expenses for activities authorized under title I of the HCDA related to disaster relief, long- term recovery, restoration of infrastructure and housing, economic revitalization, and mitigation of risk associated with activities carried out for these purposes, in the "most impacted and distressed" areas (identified by HUD or the grantee) resulting from a major disaster. All CDBG–DR funded activities/projects must address an impact of the disaster for which funding was allocated. Accordingly, each activity must: (1) Address a direct or indirect impact from the disaster in a most impacted and distressed area; (2) be a CDBG- eligible activity (or be eligible under a waiver or alternative requirement); and (3) meet a national objective. Additionally, grantees may use up to five percent of the total grant award for grant administration. Expenditures for planning activities may also be counted towards the HUD-identified MID area requirement, if the grantee describes in its action plan how those planning activities benefit those areas. All of the proposed CDBG-DR activities and projects will be administered by the City of Dearborn Economic Development Department (EDD) and all of the infrastructure funding decisions will be made by the city. The Engineering Division (ED) will provide civil engineering and technical support for the infrastructure projects and the Department Public Works and Facilities (PWF) will provide technical support for the green infrastructure, rain garden, and tree installation projects. **Given the nature of all of the proposed CDBG-DR projects, the City of Dearborn does not anticipate program income being generated.**

Planning Activities

All of Dearborn's planning activities will directly benefit the HUD identified MID area which includes the entire City. Each planning activity will be directly related to our proposed projects and most of the projects will take place in northeast and southeast Dearborn, which are the areas most impacted and distressed by the June 2021 flooding. Table #2 below identifies the original and amended planning activities budgets.

Table 2- Planning Activities in Action Plan and 2nd Substantial Amendment Amended Budget

Project	Action Plan Budget	2nd Substantial Amendment Budget	Description
Green Infrastructure	$200,000	**$225,000**	Planning Activities for Green Infrastructure Projects. Funds will be utilized for project strategy and feasibility, preparation of plans, studies, training or research, engineering design activities, preparation of procurement documents for contractors, and drafting of contracts.
Salina Green Schoolyards Project	$25,000	**$0**	Planning activities for Salina Schools. Funds will be used for project strategy and feasibility and drafting of subrecipient and contractor documents.

Green Infrastructure

Due to the cost of the implementation of permeable pavement the City is looking at other green infrastructure projects for stormwater management. Preliminary estimates for an initial permeable pavement project would cost $1.3 million for only three residential city blocks. Other types of green infrastructure projects would not be as expensive such as installing bioretention projects and would aid in flood mitigation efforts. These bioretention projects would also increase resilience to disasters and reduce or eliminate the long-term risk of loss of life, injury, damage, to and loss of property, and suffering and hardship, by lessening the impact of future disasters. The City will incorporate these projects into its short-term and long-term stormwater management plans once the OHM advisors have completed the two-year comprehensive study of the City's sewer and stormwater systems.

The first phase will consist of using bioretention instead of permeable pavement on streets in the northeast and southeast areas of the city. Bioretention is a stormwater management technique where landscaped and vegetated depressions capture and slow the flow of stormwater, which allows the water to be taken up by plants and seep into the ground. This process helps to reduce the volume of stormwater run-off and improve quality by removing pollutants from the runoff. Bioretention cells, or rain gardens, are the landscaped and vegetated depressions that capture and filter stormwater runoff. These bioretention cells are a fraction (usually between one-tenth and one-fourth) of the impermeable area and may be installed in lawns, the edges of a road, or in medians. Stormwater is directed into the cells by pipes, swales, or curb openings. Usually underneath the vegetated layer is a crushed stone layer. Stormwater runoff directed to bioretention cells will percolate through the soil and stone medium, which provides filtering before infiltration to native soil, or returning through an underdrain to the stormwater drainage

system. This underdrain is typically placed above the bottom of the crushed stone layer to provide positive drainage once the stone layer storage is filled.

For phase two, the City will explore other green infrastructure projects. In the aftermath of the 2021 flooding disaster, the City contracted with OHM Advisors to do a comprehensive study of the City's sewer and stormwater systems to find ways to mitigate recurring flood challenges. OHM Advisors will be studying and collecting information and using it to predict how upgrades to the sewer/stormwater system can reduce flooding. This will help the city in the development of a stormwater management plan, including developing short-term and long-term solutions to flooding utilizing both grey and green infrastructure improvements. The final report is not slated to be done until October 2024. EDD will look at the final report to see how we can implement CDBG-DR green infrastructure projects via OHM's recommendations from the final study. Conventional grey stormwater infrastructure quickly drains stormwater to rivers and streams, increasing peak flows and flood risk. Green infrastructure can mitigate flood risk by slowing and reducing stormwater discharges.

In 2019, Congress enacted the Water Infrastructure Improvement Act, which defines green infrastructure as "the range of measures that use plant or soil systems, permeable pavement or other permeable surfaces or substrates, stormwater harvest and reuse, or landscaping to store, infiltrate, or evapotranspiration stormwater and reduce flows to sewer systems or to surface waters." [4] Examples at the urban scale could include a rain barrel up against a house, a row of trees along a major city street, or greening an alleyway. Neighborhood scale green infrastructure could include acres of open park land, planting rain gardens or constructing a wetland. At the landscape or watershed scale, examples could include protecting large open natural spaces, riparian areas, wetlands or greening steep hillsides. When green infrastructure systems are installed throughout a community, city or across a regional watershed, they can provide cleaner air and water as well as significant value for the community with flood protection, diverse habitat, and beautiful green spaces.

HUD National Objective Code – Low Mod Area (LMA)

HUD Matrix Code 03I – Flood Drainage Improvements

Salina Green Schoolyards Project – CANCELLED

[4] Water Infrastructure Improvement Act. Retrieved from: https://www.congress.gov/115/plaws/publ436/PLAW-115publ436.pdf

Amended CDBG-DR Projects Budgets

Table #3 lists Dearborn Proposed CDBG-DR Projects Budget Table which identifies the Action Plan budget and 2nd Substantial Amendment budget.

Table 3: DEARBORN PROPOSED CDBG-DR PROJECTS BUDGET

CDBG-DR Grant Allocation		**Action Plan**	**2nd Substantial Amendment**
Green Infrastructure (Mitigation Set-Aside) **(Replacing Permeable Pavement Project)** **Green Infrastructure Projects timeline months 19 through 48:** Installation of CDBG-DR Project Improvements begins and outreach to the community to keep them informed of project updates.			
Green Infrastructure • **Construction** • **Contingency**	**$2,375,000** **$ 800,000**	**$3,255,600**	**$3,535,600** **(Added $280,000)**
Dearborn Salina Green Schoolyards Project **Green Projects timeline month 19 through 48:** Creation of Green Spaces at Salina Schools			
Installation • **Construction** • **Contingency**	**$245,000** **$35,000**	**$280,000**	**$0** **(Deleted 280,000)**

Dearborn CDBG-DR Mitigation Set Aside Plan

According to Section IV.A.2 CDBG-DR mitigation set aside in the FRN FR-6326-N-01 "the Appropriations Act requires HUD to include in any allocation of CDBG-DR funds for unmet needs an additional amount of 15 percent for mitigation activities ("CDBG-DR mitigation set aside")." For purposes of grants under this notice, mitigation activities are defined as those activities that increase resilience to disasters and reduce or eliminate the long-term risk of loss of life, injury, damage, to and loss of property, and suffering and hardship, by lessening the impact of future disasters. The 15% mitigation set aside for the 1st appropriation is $2,130,000 and the City intends to spend approximately $3,450,000 (or 21%) on mitigation activities.

In FRN FR-6368-N-01 for the 2nd Appropriation of CDBG-DR funding, the 15% mitigation set-aside amount is $1,392,000 and the City intends to spend $1,432,940 or 17.93% towards mitigation activities. The grand total for all of the mitigation activities is $4,922,940 which is 18.08% of the total $27,005,000 CDBG-DR allocation.

"Unlike recovery activities where grantees must demonstrate that their activities "tie back" to the specific disaster and address a specific unmet recovery need for which the CDBG-DR funds were appropriated, activities funded by CDBG-DR mitigation set-aside do not require such a "tie-back" to the specific qualified disaster that has served as a basis for the grantee's allocation. Instead, grantees must demonstrate that activities funded by the CDBG-DR mitigation set-aside meet the provisions included as (1) through (4) in the prior paragraph, to be eligible."

The Mitigation Set Aside project budget revisions for the 2nd Substantial Amendments will delete $280,000 from the Dearborn Salina Green Schoolyard Project budget and will add $280,000 to the Green Infrastructure Project budget.

The mitigation projects the City has chosen to pursue came out of Dearborn's 2018 Stormwater Toolkit and can be implemented right away. These projects also align with the City of Dearborn's current administration's desire to pursue green infrastructure while we await the final sewer/stormwater study from OHM Advisors. Based on our CDBG-DR allocation, these are the projects identified for the mitigation set aside listed below in Table #4.

Table 4: DEARBORN CDBG-DR MITIGATION SET-A-SIDE PROPOSED PROJECTS TABLE

Mitigation Set-Aside Green Infrastructure • Construction • Contingency	 $2,700,600 $ 835,000	 **$3,535,600** **(Added $280,000)**
Mitigation Set-Aside Dearborn Green Schoolyard Vision: Salina Schools • Construction • Contingency	 $0 $0	 **$0 (Deleted $280,000)**

Green Infrastructure – Green infrastructure projects will be implemented on streets and to areas that were the most impacted and severely flooded during the 2021 storm, which are overwhelmingly found on the northeast and southeast areas of Dearborn.

The first part of the project will consist of implementing bioretention along street and medians in areas that were the most impacted and severely flooded in the northeast and southeast neighborhoods. Bioretention is an important technique that uses soil, plants, and microbes to treat stormwater before it is infiltrated or discharged. Bioretention cells have shallow depressions filled with sandy soils, topped with a thick layer of mulch, and planted with dense vegetation. Stormwater runoff flows into the cell and slowly percolates through the soil (which acts as a filter) and

into the groundwater, some of the water is also taken up by plants. Bioretention areas are usually designed to allow ponded water 6 -8 inches deep, with an overflow outlet to prevent flooding during heavy storms.

The second part of this project will consist of implementing green infrastructure projects that will come out of the 2-year OHM sewer and stormwater study. The final report is not slated to be done until October 2024. EDD will look at the report and decide what green infrastructure projects would be best to implement in northeast and southeast Dearborn with the CDBG-DR funding. In the most impacted and severely flooded areas the implementation of green infrastructure will reduce future damage to grey infrastructure and property. Because of impervious surfaces like pavement and rooftops, a typical city block generates more than 5 times the stormwater runoff than a woodland area of the same size.[5]

Examples of the proposed green infrastructure projects that could come out the OHM study could include but not limited to:

- Downspout Disconnection
- Rainwater Harvesting
- Rain Gardens
- Planter Boxes
- Bioswales
- Permeable Pavements
- Green Streets and Alleys
- Green Parking
- Green Roofs
- Urban Tree Canopy
- Land Conservation

Implementation of green infrastructure is often less expensive than more conventional water management strategies. Philadelphia found that its new green infrastructure plan will cost 2.4 billion over 25 years, as opposed to 9.6 billion that a grey infrastructure plan would have cost.[6]

HUD National Objective Code – Low Mod Area (LMA)

HUD Matrix Code 03I – Flood Drainage Improvements and Tree Projects

[5] Protecting Water Quality from Urban Runoff: https://www3.epa.gov/npdes/pubs/nps_urban-facts_final.pdf

[6] Green Infrastructure: How to Manage Water in a Sustainable Way: https://www.nrdc.org/stories/green-infrastructure-how-manage-water-sustainable-way#whatis

Preparedness, Mitigation and Resiliency

Funding Feasible, Cost-Effective Measures

According to historical events data in the Wayne County Hazard Mitigation Plan (WCHMP), since 1996, a total of 51 individual flood or flash flood events have been recorded in Wayne County. Many areas of Wayne County are heavily urbanized and are located along river corridors. Most of these areas are connected to aging municipal storm sewer systems that can exacerbate flooding. The plan stated it is highly probable that urban flooding will continue to occur in the county. As development continues and as stormwater infrastructure continues to age, an increase in urban flooding may occur. Additionally, scientists predict that climate change will increase the number of extreme rainfall and storm events, leading to more flooding throughout the Midwest and costing taxpayers as much as $480 million annually just to adapt stormwater systems to handle the increased stormwater runoff[7].

The City of Dearborn will ensure that all of the CDBG-DR projects will be feasible and cost effective which will make the community more resilient against future disasters. The city is a member of National Flood Insurance Program (NFIP) which is managed by the FEMA and is delivered to the public by a network of more than 50 insurance companies and the NFIP Direct[8]. The NFIP works with communities required to adopt and enforce floodplain management regulations that help mitigate flooding effects. Dearborn has worked many decades with FEMA to develop Special Flood Hazard Areas (SFHA) throughout the city. These are areas where there is a 1% chance of flooding within any given year. All of the SFHA areas are identified on the federal Flood Insurance Rate Maps (FIRM). The city will always review/locate any newly proposed projects on the FIRM map for feasibility. Dearborn will not complete any CDBG-DR projects in the SFHA areas.

The City of Dearborn will take into account the costs and benefits of incorporating hazard mitigation measures to protect against the specific identified impacts of future extreme weather events and other natural hazards. Dearborn will incorporate consistent, comprehensive stormwater performance standards while also promoting the use of green stormwater infrastructure for the infrastructure construction activities. This helps to ensure that communities build back safer and stronger than before the disaster. Incorporation of these measures also reduces costs in recovering from future disasters. Mitigation measures that are not incorporated into those rebuilding activities must be a necessary expense related to disaster relief, long-term recovery and restoration of infrastructure. The Engineering Division will also help determine if infrastructure construction proposals are reasonable and in line with market costs.

The benefits definitely out way the costs for the proposed rain garden projects because these gardens can hold thousands of gallons of water that will can be used for your garden and prevent pollutants from contaminating our

[7] USGCRP, *2018: Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment*, Volume II [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 1515 pp. doi: 10.7930/NCA4.2018

[8] *Welcome to NFIP Direct*. Retrieved from https://my.nfipdirect.fema.gov/

waterways. Rain garden captures runoff of rain, melting snow that will run off roofs, driveways, and lawns then temporarily holds and filters storm water back into the ground, preventing it from running off and ultimately reaching nearby streams, rivers, ponds and ultimately back into the city's stormwater lines. On average, professional installation costs for a rain garden is about $10 to $20 per square foot which is significantly cheaper than normal grey infrastructure costs. The most important benefit from rain gardens are they're great hazard mitigation tools because rain gardens will decrease large amounts of water from entering the city's stormwater systems.

Runoff from stormwater continues to be a major cause of flooding in urban areas. Historically, communities have used gray infrastructure—systems of gutters, pipes, and tunnels—to move stormwater away from where we live to treatment plants or straight to local water bodies. The gray infrastructure in many areas is aging, and its existing capacity to manage large volumes of stormwater is decreasing in areas across the country. To meet this challenge, Dearborn will be installing bioretention and other green infrastructure systems to bolster our capacity to manage stormwater. By doing so Dearborn will become more resilient and achieve environmental, social and economic benefits.

Trees provide numerous benefits such as; supporting the economy, absorbing harmful gases, supports wildlife, improves mental health, offset environmental impacts, provides water filtration, and offsets flooding impacts. As storms become more and more severe, cities and states are turning towards trees to minimize the damage. New studies suggest that trees planted around rivers may reduce the height of flooding as much as 20 percent[9]. According to internal figures and United States Forestry Services projections, the city's existing tree canopy has intercepted over 1.2 million gallons of water and prevented over 400,000 gallons of runoff since 2020. The average cost to plant a tree is $300 which is extremely inexpensive given all the health, natural, and mitigation benefits trees give.

Promote Sound, Sustainable Long-Term Recovery and Resilience Planning

The City of Dearborn has allocated some funding toward planning activities. One of the primary purposes of the CDBG-DR program is to promote sound, sustainable long-term recovery that accounts for an understanding of current and projected natural hazard risks, including climate-related hazards.

In addition to the planning activities, Dearborn will fund the Colson Palmer and Ford infrastructure projects to address unmet recovery and mitigation needs associated with general infrastructure and public facilities. The grant funds will allow the city to construct infrastructure that is directly benefiting individuals and the larger community. Dearborn's proposed major infrastructure project, Colson Palmer Stormwater Line, does 'tie-back" to the June 2021 flooding. During the 2021 storm, the water level of the Rouge River reached 583 ft., 9 feet higher than average and 4 ft. above the water elevation that the Colson Palmer stormwater line was designed to keep the river water from

[9] Lawn Care Blog | Lawn Love. *How Much Does It Cost to Plant a Tree?* - https://lawnlove.com/blog/cost-to-plant-tree/#:~:text=Average%20costs%20to%20plant%20a%20tree%20in%202023&text=The%20average%20cost%20of%20tree,landscaper%20or%20arborist%20plant%20it

flowing back into the storm sewer network. Backflow from the Rouge River prevented stormwater from draining into the river and forced the stormwater to back up into the sewer system and then forcing water to back up into homes. The Oakwood Blvd Infrastructure Project will also tie-back to the June 2021 flooding. Neighborhoods and businesses around Oakwood Blvd did experience flooding and this project will update the sewer and stormwater system in this area and help to decrease flooding issues in the future.

Both FRN's requires HUD to include in any CDBG-DR funding allocation an additional 15 percent for mitigation activities ("CDBG-DR mitigation set aside") funds for unmet needs. The 15% set aside for Dearborn is $3,522,000. Dearborn is proposing to use 18%, or $4,922,940 of its CDBG-DR funding for mitigation activities. A majority of this funding, 72%, or $3,535,600 will be used for the Green Infrastructure Project. The city will implement this CDBG-DR project on streets and areas in the northeast and southeast of Dearborn that were the most distressed and devastated from the June 2021 flooding event.

The green infrastructure, rain garden, and tree planting projects will help build resiliency against future disaster events in Dearborn because they are very effective mitigation tools to fight against natural hazard risks including climate-related risks such as severe flooding. These mitigation set-aside projects are already being utilized around Dearborn. Businesses, schools, and homes have already implemented their own rain garden projects and tree planting is ongoing through programs offered by the city and in partnership with FOTR. New permeable pavement projects are being completed utilizing the city's annual CDBG funding. The rain gardens, tree planting, and green infrastructure projects will be considered mitigation projects.