Executive Summary MWRD City of Harvey Stormwater Management Project Final Environmental Assessment

December 2024

Introduction

The Illinois Emergency Management Agency (Applicant) and the Metropolitan Water Reclamation District of Greater Chicago (MWRD, Subapplicant) propose to implement stormwater management measures to mitigate potential future flood damage and loss within the City of Harvey. The MWRD applied to the Federal Emergency Management Agency (FEMA) through the Illinois Emergency Management Agency for a grant under FEMA's Building Resilient Infrastructure and Communities (BRIC) program. The BRIC program is authorized under Section 203 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 United States Code 5133, as amended by the Disaster Recovery Reform Act of 2018.

The environmental assessment (EA) was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, 42 United States Code §§ 4321–4370h; the President's Council on Environmental Quality regulations to implement NEPA (40 Code of Federal Regulations Parts 1500 to 1508); the U.S. Department of Homeland Security's Directive No. 023-01, rev. 1, Implementation of the National Environmental Policy Act (October 31, 2014); Department of Homeland Security Instruction Manual No. 023-01-001-01, rev. 1, Implementation of the National Environmental Policy Act (November 6, 2014); FEMA Directive No. 108-01, Environmental Planning and Historic Preservation Responsibilities and Program Requirements (August 22, 2016); and FEMA Instruction 108-01-1, Instruction on Implementation of the Environmental and Historic Preservation Responsibilities and Program Requirements (August 22, 2016). FEMA is required to consider potential environmental impacts before funding or approving actions and projects. The purpose of the EA is to analyze the potential environmental impacts of the proposed project and alternatives, including a No Action alternative. FEMA used the findings in this EA for the proposed project to issue a Finding of No Significant Impact.

Purpose and Need

The objective of the BRIC grant program is to support states, local communities, tribes, and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. The program's guiding principles are supporting communities through capability and capacity building, encouraging and enabling innovation, promoting





partnerships, enabling large infrastructure projects, maintaining flexibility, and providing consistency. The purpose of the proposed project is to reduce flood hazards and protect people and property within the City of Harvey.

The project area is in the City of Harvey in Cook County, Illinois. The City of Harvey is south of the City of Chicago and the Little Calumet River. The project would involve improvements over a 126-acre project area bounded by 152nd Street to the north, Center Avenue to the east, 154th Street to the south, and South Wood Street to the west. General project coordinates are 41.611047, -87.652735. The general project location is shown in **Figure 1**.

This project is needed because the city has a history of widespread flooding, particularly in the northeast part of the city along the CSX railroad. Stormwater runoff generated within the project area and vicinity is primarily handled by a combined sewer system, which collects and conveys stormwater runoff and sanitary sewer flows through the same system of pipes. This system limits conveyance and flood storage capacity. During heavy rain events, the combined sewer system can become overwhelmed by excess water, resulting in shallow ponding and flooding in and near the project area. Flood events in the city have resulted in hazards and damage, including combined sewer backups into basements, overland flow into buildings, and nuisance street and yard flooding (HRGreen 2021).

Climate change is increasing the frequency of flooding throughout Illinois. Over the last half century, the average annual precipitation in the Midwest has generally increased by 5 to 10 percent. Additionally, rainfall during the four wettest days of the year has increased by about 35 percent, and the amount of water flowing in most streams during the worst flood of the year has increased by more than 20 percent. These patterns are expected to continue to increase over the next century, increasing the risk of future flooding (U.S. Environmental Protection Agency 2016). Flood risk reduction measures are needed to reduce the risk of precipitation-induced flooding within and adjacent to the project area.

Description of Alternatives

NEPA requires FEMA to evaluate alternatives to the Proposed Action and describe the environmental impacts of each alternative. NEPA also requires an evaluation of the No Action alternative, which is the future condition without the project. This section describes the No Action alternative, the Proposed Action, and alternatives that were considered but dismissed.

Alternative 1 – No Action

The No Action alternative is included to describe potential future conditions if no action is taken to reduce flood risks. Under the No Action alternative, MWRD would not receive FEMA funds for comprehensive hazard mitigation or flood risk management. Under the No Action alternative, a detention basin and stormwater improvements would not be implemented





within the City of Harvey. This alternative would not result in any additional increase in the flood storage capacity in the project area, nor separation of stormwater and wastewater sewer lines. Stormwater runoff would continue to be conveyed through combined sewer systems, limiting flood storage capacity, and risking combined sewer overflows and sewer backups into basements. Structures and roadways within and surrounding the project area would remain at risk of inundation and damage from flooding. Additionally, flood risk in the project area would worsen because of the effects of climate change.

Alternative 2 – Proposed Action

Under the Proposed Action, MWRD proposes to construct a new stormwater system and detention basin in the City of Harvey, which is in Cook County, Illinois. The new stormwater sewer would drain into the Illinois Department of Transportation's (IDOT) large diameter storm sewer system, the Wood Street Sewer System, which is treated at the Calumet Water Reclamation Plant and discharged into the Little Calumet River (MWRD 2023a). The Proposed Action would require approximately 6 acres of disturbance over the 126-acre project area and construction activities would comply with the General National Pollution Discharge Elimination System Permit for Stormwater Discharges from Construction Site Activities (Permit Number ILR10). The Proposed Action would take approximately 23 months to construct and would reduce flood related damage from the 100-year flood event for approximately 690 structures within the city. The City of Harvey would be responsible for continued maintenance of the Proposed Action.

Stormwater Detention Basin

FEMA

A naturalized stormwater detention basin would be constructed along Myrtle Avenue between 153rd and 154th streets to provide an additional 23-acre-feet of stormwater storage capacity. The detention basin would be approximately 3.4 acres in area and 10 feet deep, with small areas in the center of the basin being up to 15 feet deep. An 8-foot-wide path would be constructed around the perimeter of the pond. To construct the detention basin, 15 existing structures along Myrtle Avenue and the Myrtle Avenue roadway between 153rd and 154th streets would be demolished and removed. Additionally, approximately 114 trees would be removed. The site would be accessed from 153rd and 154th streets and equipment would likely be staged along existing streets and paved areas. Excavated materials would be hauled off-site to a designated disposal location.

The slopes of the detention basin would be stabilized with geotextile fabric and bedding, erosion control blankets, and plantings. Emergent wetland plants would be installed at or below the water levels of the pond. A native mesic prairie seed mix would be planted slightly above the water level and along the upper slopes of the pond. The plantings would provide increased stormwater attenuation and natural pollutant removal for the pond. The area surrounding the detention pond, bounded by 153rd Street to the south, 154th Street to the north, and alleyways





to the east and west, would be covered with 6 inches of topsoil and reseeded. To ensure the public's safety around the detention basin, MWRD would construct a shallow water shelf around the perimeter of the detention basin that would be approximately 10-feet wide and 1-foot deep when the basin is at its normal water level. **Figure 2** shows the proposed detention basin and open space area.

Non-federal Action

The proposed location of the detention basin currently includes 31 parcels, of which 16 are vacant and 15 contain residential buildings. MWRD would fund the acquisition of the 31 parcels before implementation of the FEMA-funded project. Thus, acquisition of the structures is considered a non-federal action. The Proposed Action would include the demolition of the 15 structures. Parcels and buildings to be acquired and demolished are shown in **Figure 3**.

Storm Sewer Upgrades

Approximately 1,900 feet of 18-inch to 36-inch storm sewers would be constructed along 153rd Street between Myrtle Avenue and Center Avenue to convey stormwater to the newly constructed detention basin. Additionally, approximately 2,250 feet of 24-inch to 36-inch storm sewers would be built along 153rd Street between Wood Street and Myrtle Avenue to connect with the IDOT storm sewer system. A control structure would be installed at the west end of the storm sewer system at 153rd and Wood streets to limit flows to the storm sewer to 20 cubic feet per second and ensure efficient operation of the storm sewer system and detention basin.

Additionally, approximately 700 feet of low-flow 12-inch storm sewers would be built along Vine Avenue between 153rd and 152nd streets to connect a low point of the proposed storm sewer system to the city's existing combined sewer system to the north of the project area; stormwater from the detention basin and a portion of the western side of the project area would be channeled through the Vine Avenue pipe into the existing sewer system. Approximately 5,000 feet of 12-inch to 18-inch storm sewer improvements would be constructed along the following side streets between 153rd and 154th streets: Paulina Avenue, Marshfield Avenue, Ashland Avenue, Vine Avenue, Myrtle Avenue, Loomis Avenue, Lexington Avenue, and Turlington Avenue. The maximum ground disturbance depth for storm sewer improvements would be approximately 15 feet. Equipment would be staged along existing roadways.

Most runoff in the project area would be directed by the new storm sewer improvements to flow into the proposed detention basin. Once stormwater has reached the capacity of the detention basin drain, runoff would exit the basin and flow west to Vine Avenue and then north to drain into a 36-inch storm sewer running along 152nd Street.







Figure 1: General Project Location



Project Area: H

Figure 2: Project Area and Features





Proposed Detention Basin



Proposed Storm Sewers











Alternatives Considered and Eliminated from Further Analysis

Flood Study

The City of Harvey and MWRD considered additional alternatives to the Proposed Action based on the objectives to reduce surface flooding for the 25-year, 50-year, and 100-year storm events; maximize the reduction of impacted structures from these flood events; and eliminate or reduce basement sewer backups during a 10-year storm event. As a result of the study, two alternatives to the Proposed Action were identified. The alternatives included a stormwater conveyance-only alternative and a stormwater storage-only alternative implemented in the project area and vicinity (HRGreen 2022).

The conveyance-only alternative would include the installation of additional conveyance pipes and relief sewers to separate storm flows from going into combined sewers via available outlets. The study found that the effectiveness of this alternative would be directly dependent on the available capacity of the five major trunk sewers underneath the CSX railroad bed that facilitate drainage for the study area. Any proposed conveyance improvements would need to connect into these trunk sewers to accommodate flow downstream into the combined sewer or Little Calumet River. However, there is a lack of capacity in these trunk sewers, which limits flood conveyance capacity. The results from this alternative concept analysis indicate that there would be only a marginal reduction in flooding for a 25-year storm event. Thus, it does not meet the city's objectives for flood reduction. The City of Harvey and MWRD determined that a conveyance-only option was not a viable alternative by itself to address flooding in the project area.

The storage-only alternative would include the construction of detention basins throughout the study area to reduce flooding. Because of the lack of capacity in the trunk sewers leaving the study area, the construction of detention basins would be necessary to provide enough storage to attenuate peak flood flows to reduce the stress on existing trunk sewers. However, any detention basin construction would still need to connect with the existing combined sewer system and trunk lines. Therefore, it was determined that implementing the storage-only alternative without conveyance improvements was not a viable alternative to reduce flood risk in the project area.

Installation of Green Infrastructure

FEMA and MWRD encourage smaller scale green infrastructure measures, including the installation of rain gardens and rain barrels, landscaping with native plants, and installing permeable pavement, to help reduce runoff and flood risk and increase resilience to climate change impacts (MWRD 2023b; FEMA 2021). MWRD considered implementing these measures throughout the city to provide increased flood storage. However, these green infrastructure measures would not adequately address the entirety of Harvey's flooding





challenges because they are smaller and shallower in depth than traditional surface detention ponds and would therefore provide less flood storage for large rain events as compared to a detention basin. Further, green infrastructure measures would not address sewer overflows from combined sewers and the associated health impacts. Thus, this alternative was dismissed from further consideration.

Installation of Backflow Valves

MWRD also considered installing backflow valves to help prevent combined sewers that are overwhelmed by storm events from backing up into basements. However, backflow valves do not address overland flooding issues or provide increased flood storage. If overland flooding issues are not addressed, damage to infrastructure and property would continue and public services and emergency services could be affected by flooded conditions. Additionally, property owners would be responsible for maintaining these valves, increasing the financial and time burden on residents. Backflow valves would require annual testing, at minimum, which would cost residents. If there are issues with the valve, residents would be required to pay for plumbing repair costs. Failure to regularly maintain these valves by the residents may result in increased flood risk and system malfunction. In addition, MWRD could not be responsible for the associated costs, system maintenance, or system failure. Thus, this alternative was dismissed from further consideration.

Alternative Locations for the Detention Pond

MWRD evaluated alternative locations for the detention basin that would not require residential displacement, primarily city-owned and vacant parcels such as the Dixie Square Mall or Lowell Longfellow School site. The area bounded by 152nd Street on the north, Center Street on the east, 154th Street on the south, and Wood Street on the west was one of the areas identified during the study for a potential detention basin. This location is one of the areas in Harvey where significant flooding occurs repeatedly. The evaluation found that the basin needs to be in the general area of Myrtle Avenue between 153rd and 154th streets to allow flow by gravity into the IDOT Wood Street storm sewer system. Moving the detention basin to areas that would not require displacement, such as the Dixie Square Mall or Lowell-Longfellow School site, would not relieve flooding in the project area. Also, because of utility conflicts and existing topography of the area, the Dixie Square Mall and Lowell-Longfellow School site would not be suitable locations to address flooding in the project area. Therefore, MWRD did not find any alternative locations for the detention basin that would achieve the same flood control benefits as the Proposed Action and that would not require some displacement.



FEMA

Permits and Conditions

MWRD is responsible for obtaining all applicable federal, state, and local permits and other authorizations for project implementation prior to construction and adherence to all permit conditions. Any substantive change to the approved scope of work will require re-evaluations by FEMA for compliance with NEPA and other laws and Executive Orders. Failure to comply with grant conditions may jeopardize federal funds.

As mentioned previously, MWRD would obtain the General Construction Stormwater Permit for construction of the Proposed Action.

General Project Conditions

- 1. MWRD is responsible for obtaining and complying with all required local, state, and federal permits and approvals.
- If deviations from the proposed scope of work result in substantial design changes, the need for additional ground disturbance, additional removal of vegetation, or any other unanticipated changes to the physical environment, MWRD must contact FEMA so that the revised project scope can be evaluated for compliance with NEPA and other applicable environmental laws.

Soils, Water Resources and Quality, Floodplain Management, Terrestrial and Aquatic Environment, and Wetlands

- 3. Place excavated material, excess fill, and debris in a licensed location that does not impact surface waters, wetlands, or the 100-year floodplain.
- 4. Conduct any activities that would occur within the floodplain in accordance with Cook County's Floodplain Management Regulations and the MWRD Watershed Management Ordinance. Coordinate with the local floodplain administrator and Illinois Department of Natural Resources about any necessary permits to conduct activities within the floodplain.

Air Quality and Climate

FEMA

5. Implement applicable best management practices from U.S. Environmental Protection Agency's Construction Emission Control Checklist (included in Appendix B of the EA).

Migratory Birds

6. Implement a seasonal work restriction; tree and vegetation removal and thinning would only occur during the winter months (between November 1 and March 31).





Hazardous Materials

- 7. Before construction, complete surveys of structures to determine the presence of leadbased paint or asbestos-containing material in structures.
- 8. Handle and dispose of any hazardous materials, including herbicides if used, in accordance with applicable local, state, and federal regulations.

Noise

- 9. Keep heavy machinery and equipment well maintained. Use sound-control devices and mufflers.
- 10. Comply with Cook County and City of Harvey's noise ordinance.

Traffic and Circulation

- 11. Use traffic control devices, such as flag people and signs, to mitigate and guide traffic as needed during construction. Place and maintain traffic control devices in accordance with the IDOT specifications and standards.
- 12.FEMA recommends that the City of Harvey post construction alerts, such as upcoming road closures and detours, on social media and signs and establish a phone number for residents to call with construction concerns and questions.

Environmental Justice and Land use and Zoning

- 13. Implement conditions for air quality, hazardous materials, noise, traffic, and public health and safety. Establish and design hauling routes to minimize the effect of short-term emissions on homes, schools, daycare centers, and playgrounds, as feasible.
- 14. MWRD and the City will follow all federal Uniform Relocation Assistance Act requirements regarding acquisition, including offering relocation assistance and advisory services to impacted property owners and residents (both owners and renters of affected properties). Document all communication regarding acquisition with homeowners and residents in accordance with the requirements in code. Follow all procedural requirements, including offering moving and related expenses, replacement housing for homeowners and tenants, mortgage insurance, relocation planning, assistance planning, and advisory services.

Public Health and Safety

FEMA

15. Complete all construction activities with qualified personnel trained in the proper use of equipment, including all safety precautions.



16.Use appropriate signage and barriers before construction activities to alert pedestrians and motorists of project activities.

Archaeological Resources and Tribal and Religious Sites

- 17. The contractor will monitor ground disturbance during the construction phase. Per FEMA standard project condition, should human skeletal remains or historic or archaeological materials be discovered during construction, all ground-disturbing activities on the project site will cease and MRWD will notify the coroner's office (in the case of human remains), the recipient (Illinois Emergency Management Agency), and FEMA. FEMA will notify the Illinois State Historic Preservation Office and the Office of the State Archaeologist. FEMA will then notify the Miami Tribe of Oklahoma, Pokagon Band of Potawatomi Indians Tribal Historic Preservation Offices, and the Match-E-Be-Nash-She-Wish Band of Pottawatomi Indians.
- 18. All borrow or fill material must come from pre-existing stockpiles or commercially procured material from a pre-existing source. If this is not the case, the subrecipient shall inform FEMA of the fill source so required agency consultations can be completed and FEMA approval will be required prior to beginning ground disturbing activities.

Summary of Environmental Consequences

This EA evaluates the existing conditions and environmental consequences of implementing the No Action Alternative and Proposed Action, as required by NEPA. **Table 1** provides a summary of the potential environmental effects from implementing the No Action alternative, Proposed Action, and any applicable proposed mitigation.

Resource	No Action Impacts	Proposed Action Impacts	Mitigation
Geology, Topography, Soils	 No short-term impacts on soils, geology, or topography. No long-term impacts on geology or topography. Minor long-term adverse impacts on soils in the project area and vicinity, depending on the extent, frequency, and duration of flood events. 	 Minor short-term adverse impacts on soils and topography from earthwork and grading. No short- or long-term impacts on geology. Minor long-term benefits on soils from the reduced risk of flooding and erosion. Negligible long-term benefits on topography from reshaping the detention basin area. 	Implement Conditions 1 and 3.

 Table 1. Summary of Environmental Impacts and Conditions





Resource	No Action Impacts	Proposed Action Impacts	Mitigation
Water Resources and Water Quality	 No short-term impact on surface or groundwater quality. Minor to moderate long-term adverse impact on surface water and groundwater quality from sedimentation and contaminants transferred by floodwaters into water bodies. 	 Minor short-term adverse impact on surface water quality during construction from equipment use. Negligible short-term adverse impact on groundwater quality from construction equipment use. Minor to moderate long- term benefits on surface and groundwater quality from reduced risk of flooding and erosion as well as site restoration 	Implement Conditions 1 and 3.
Floodplain Management	 No short-term impact on the floodplain. Moderate long-term adverse impacts from periodic flooding and impacts on people, property, and water quality. 	 Minor short-term adverse impacts from construction in the floodplain. Minor long-term adverse impacts from excavation in the floodplain that would alter the path of water. Moderate long-term benefits on floodplains by increasing flood storage, reducing flood risk, and restoring the site with plants. 	Implement Conditions 1, 3, and 4.
Air Quality	 No short-term impact on air quality. Negligible long-term adverse impacts from continued equipment emissions for flood-related road repairs and detours. 	 Minor short-term adverse impacts from construction equipment emissions and exposed soils. Negligible long-term benefits from reduced need for future repair work to address flood impacts. 	Implement Condition 5.
Climate	 No short-term impact on climate. Moderate long-term adverse impacts as climate change would increase flood risk and community 	 Minor short-term adverse impacts from construction equipment GHG emissions. Minor to moderate long-term benefits from restoration and 	Implement Condition 5.



Resource	No Action Impacts	Proposed Action Impacts	Mitigation
	resilience to climate change would not be strengthened.	increasing community resilience to climate change.	
Terrestrial and Aquatic Environment	 No short-term impacts. Negligible to minor long-term adverse impacts from periodic flooding and associated sediment and pollutant deposition in project area. 	 Minor short-term adverse impacts on terrestrial environments from vegetation clearing and other construction activities. No short-term impact on aquatic environments. Negligible long-term benefits on terrestrial and aquatic environments from construction of the detention basin, restoration with native plants, and flood pollutant mitigation. 	Implement Conditions 1, 3, 8, and 9.
Wetlands	 No short-term impacts. Negligible long-term adverse impacts from periodic flooding and associated sediment and pollutant deposition in project area, which could affect wetlands in the vicinity. 	 No short or long-term impacts as there are no wetlands in or near the project area. 	Implement Conditions 1 and 3.
Threatened and Endangered Species	 No effect on listed species. No short- or long-term impacts. 	 No effect on listed species. No short- or long-term impacts. 	No conditions required.
Migratory Birds and Bald and Golden Eagles	 No short- or long-term impacts. 	 Minor short-term adverse impacts on migratory birds. Minor long-term benefits on migratory birds from native plantings; No short- or long-term impacts on bald eagles because there is no suitable habitat in the project area. 	Implement Condition 6 and 9.



Resource	No Action Impacts	Proposed Action Impacts	Mitigation
Hazardous Materials	 No short-term impacts. Minor long-term adverse impacts from periodic flooding that could lead to the dispersal of hazardous materials. 	 Minor short-term adverse impact from construction equipment use and the potential for inadvertent exposure of known or unknown hazardous materials. Minor long-term benefit from reduced risk of flooding and dispersal of hazardous materials. 	Implement Conditions 7 and 8.
Noise	 No short-term impacts. Minor long-term periodic adverse impacts from flood- related repairs and construction. 	 Minor short-term adverse impacts associated with construction. Minor long-term beneficial impact from reduced flood risk and associated need of repair construction. 	Implement Conditions 9 and 10.
Public Services and Utilities	 No short-term impacts. Minor to moderate long-term adverse impacts from flood- related damage and service disruptions. 	 Negligible short-term adverse impacts from construction. Moderate long-term benefits from separating combined sewers and reducing the risk of flooding. 	No conditions required.
Traffic and Circulation	 No short-term impacts. Moderate recurring intermittent impacts from flood-related road closures. 	 Minor short-term adverse impact from construction traffic. Minor long-term benefit from the reduction in road closures caused by flooding. 	Implement Conditions 11 and 12.
Land Use	 No short-term impacts. Minor long-term adverse impacts from underutilization of properties. 	 No short-term impact. Minor long-term benefit from protection of existing uses. 	Implement Conditions 13 and 14.
Environmental Justice (EJ)	 No short-term disproportionate and adverse impact. Long-term disproportionate and adverse impact on EJ populations from 	 Minor short-term adverse impacts on EJ populations; however, impact would not be disproportionate and adverse because of the short duration of these 	Implement Conditions 13 and 14.



Resource	No Action Impacts	Proposed Action Impacts	Mitigation
	periodic flooding and cost of repairs.	 impacts and implementation of best management practices. Moderate long-term benefit on EJ populations from reduced flooding and flood hazards. 	
Public Health and Safety	 No short-term impacts. Moderate long-term adverse impacts from future flood events. 	 Negligible short-term adverse impacts from construction. Moderate long-term benefit from reducing the risk of flooding that would threaten life and property. 	Implement Conditions 15 and 16.
Historic Structures	 No short-term impacts. Minor to moderate long-term adverse impact on the identified historic structures from periodic future flood events. 	 No short-term impact on historic structures. Minor to moderate long-term benefits on the NRHP-eligible property by reducing the increased risk. 	No conditions required.
Archaeological Resources	No Impact	No Impact	Implement Conditions 17 and 18.
Tribal and Religious Sites	No Impact	No Impact	Implement Condition 17.

Draft Environmental Assessment Public Comment

This Draft EA was made available for agency and public review and comment for a period of 30 days from November 4, 2024, to December 4, 2024. The public engagement process included a public notice with information about the Proposed Action in the *Chicago Tribune* and *Daily Southtown*. The Draft EA was made available on the MWRD's website at https://mwrd.org/public-notices. A hard copy of this EA was available for review at the Harvey City Hall at 15320 Broadway Avenue, Harvey, Illinois 60426.

Comments were received from two members of the public. Both commenters expressed concern about the acquisitions of residential homes that would take place as part the non-federal action and stated that the project was planned without community input. They encouraged MWRD and the City to consider alternative locations for constructing the detention basin in locations that would not require residential displacement.





One commenter encouraged the use of alternative flood risk reduction strategies, including sewer backflow valves.

MWRD considered alternative flood risk strategies to the Proposed Action, including sewer backflow valves. However, these alternatives were dismissed as they would not meet the purpose and need of the project, as discussed in Section 2.3 of the EA. Specifically, sewer backflow valves would have an increased financial burden on residents and would not reduce flooding and associated damage in the community. Alternative locations for the detention basin that would not require residential displacement were also analyzed and dismissed. Section 2.3 of the Final EA was updated to further address these comments and provide rationale for why other alternatives, including sewer backflow valves, would not meet the purpose and need for the project. Public engagement for the Proposed Action followed all NEPA requirements, including two 30-day public comment periods for the Scoping Document and EA and additional engagement as summarized in Section 5 of the EA.

A petition was circulated in 2023 that included a call to reuse and preserve the Ascension-St. Susanna campus on 153rd and Myrtle Avenue and a request to use an alternate site for a retention pond that does not require residential displacement. As discussed in Section 3.6 of the EA, the Proposed Action would not have a direct impact on the Ascension-St. Susanna School and Church Complex. No construction activities will impact the complex as a result of the Proposed Action. The Proposed Action would have minor to moderate long-term benefits on the Ascension-St. Susanna School and Church Complex by reducing the risk of flooding and associated damage to the historic property. As discussed above, MWRD did not find any alternative locations for the detention basin that would achieve the same flood control benefits as the Proposed Action and that would not require some displacement.

Additionally, one comment letter was received from the U.S. Environmental Protection Agency with recommendations related to EJ and public participation, air quality, project features including maintenance of vegetation and protective measures around the detention pond, construction, and mitigation. These recommendations were incorporated into the Final EA as appropriate.

Acronyms

BRIC	Building Resilient Infrastructure and Communities
EA	Environmental Assessment
EJ	Environmental Justice
FEMA	Federal Emergency Management Agency
IDOT	Illinois Department of Transportation
MWRD	Metropolitan Water Reclamation District of Greater Chicago
NEPA	National Environmental Policy Act



FEMA

References

- Federal Emergency Management Agency (FEMA). 2021. Building Community Resilience with Nature-Based Solutions: A Guide for Local Communities. Accessed November 21, 2024, <u>https://www.fema.gov/sites/default/files/documents/fema_riskmap-naturebased-solutions-guide_2021.pdf</u>.
- HRGreen Inc. 2022. Preliminary Design Report: Flood Relief for Residential Area near 147th Street and Wood Street in Harvey, Illinois. Prepared for Metropolitan Water Reclamation District of Greater Chicago.
- ——. 2021. Metropolitan Water Reclamation District of Greater Chicago Central Park Stormwater Detention Basin and Separate Storm Sewer Improvements in Harvey, CSA HR Green Job No. 201365 MWRD Contract 18-249-AF.
- Metropolitan Water Reclamation District of Greater Chicago (MWRD). 2023a. "Fact Sheet: Calumet Water Reclamation Plant." Accessed August 22, 2024. <u>https://mwrd.org/sites/default/files/documents/Fact_Sheet_Calumet.pdf</u>.
- ——. 2023b. "You Can Help Prevent Flooding and Protect Water Quality." Accessed November 21, 2024. <u>https://mwrd.org/community-action/you-can-help-prevent-flooding-and-protect-water-quality</u>.
- U.S. Environmental Protection Agency. 2016. What Climate Change Means for Illinois. EPA 430-F-16-015. Accessed April 22, 2024, <u>https://www.epa.gov/sites/default/files/2016-08/documents/climate-change-il.pdf</u>.



