CLEAN WATER, GOOD FOOD, GREAT PLACE

Eastern Market Green Stormwater Management Strategy

Prepared by the Detroit Collaborative Design Center at the University of Detroit Mercy School of Architecture in partnership with the Eastern Market Corporation and with support from OLIN and CDM Smith Inc. Made possible with support from the Kresge Foundation. March 2015
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Eastern Market Green Stormwater Management Strategy

OVERVIEW

Introduction
This report outlines a preliminary feasibility study for incorporating green stormwater infrastructure throughout the Eastern Market District. The Eastern Market Green Stormwater Management Strategy proposes districtwide sustainable stormwater management strategies that would capture runoff, reduce drainage charges paid by property owners, beautify the neighborhood, and provide educational opportunities. The study was prompted by both Eastern Market Corporation’s (EMC) interest in taking a more proactive approach to stormwater management based on its focus on sustainable development as well as the Detroit Water and Sewerage Department’s (DWSD) need to reduce its combined sewer overflows and treatment costs. This proposal lays the framework for a viable plan to disconnect hundreds of acres of stormwater from the system, which would be a massive win for clean water and a landmark example of a proactive green infrastructure partnership between public and private stakeholders that is unprecedented in scale. The district plan is good for the environment, saves money, and contributes to a healthier Detroit.

The proposal highlights and compares strategies for achieving more effective stormwater management and collective savings at various scales and in different parts of the market district: the Eastern Market Public Core, the Existing Eastern Market District, the proposed Eastern Market Food Innovation District, and the Combined District. This study recommends implementing stormwater infrastructure strategies for the comprehensive Combined District area, an approach that would have the greatest environmental and economic impact. Additionally, the proposal recommends creating a district-based stormwater entity managed by EMC that would fund, implement, and maintain the green infrastructure strategies in coordination with DWSD. This stormwater management entity would facilitate a district-based stormwater drainage charge structure for property owners that includes reductions for on-site green infrastructure. This study indicates that estimated drainage charge reductions, while substantial, must be supplemented with additional funding, incentives or subsidies that would make green stormwater infrastructure projects more feasible for property owners. Possible funding opportunities are included under Implementation Recommendations in this document. The proposed district is also an opportunity for DWSD to further fund and support neighborhood-scale green stormwater infrastructure initiatives that model a commitment to reducing runoff and contributing to clean water. Finally, implementing this strategy requires a layered and phased approach to the districtwide implementation of green infrastructure strategies in the market district.

Why green stormwater infrastructure (GSI)?
Green stormwater infrastructure manages wet weather runoff through natural systems that feature a combination of plantings and subsurface soil conditions that collect runoff and reduce the amount of stormwater that enters Detroit’s combined sewer system. GSI systems divert water through infiltration, evapotranspiration, and reuse. Sustainable development models embrace GSI as a way to manage stormwater runoff that reduces gray infrastructure and utility costs and also provides natural features that enhance neighborhoods and provide other environmental benefits. Conversely, conventional gray stormwater infrastructure systems collect, move, and treat water through a series of large pipes, pumps, and treatment facilities with high associated costs. GSI solutions are more cost-effective to implement and maintain than traditional gray infrastructure, and provide more secondary benefits ranging from reduced flooding to improved public health.

In Detroit, a combined sewer system carries both sewage and stormwater to treatment plants before being released into the Detroit River and River Rouge. When there is too much runoff for the collection system to handle, untreated or partially-treated combined sewage is discharged into the river. This event is called a combined sewer overflow (CSO). GSI helps reduce runoff and in turn reduce the number of CSO events, improving water quality and reducing associated costs. Additionally, large storms cause flooding when significant quantities of stormwater overwhelm the combined sewer system, which may result in basement backups and street flooding. The City of Detroit has invested approximately $1 billion into CSO control over the last 20 years. The City’s National Pollutant Discharge Elimination System (NPDES) permit requires that additional investments in CSO be made until all discharges meet regulatory requirements. GSI is being explored as a fundamental component of the future CSO control strategies.

Currently, property owners in Detroit are billed a drainage charge that is based on the parcel size and the percentage of impervious area. DWSD is currently developing a plan to base drainage charges not only on their amount of impervious area but also on how stormwater is managed on site.

Why a districtwide stormwater infrastructure and management strategy for the Eastern Market District?
The Eastern Market District is a vibrant public market that is also home to major food distributors and processors. The light industrial nature of the area features many impervious surfaces, especially parking lots and roofs. The opportunity to capture substantial runoff from warehouses and parking lots is great, as is the opportunity for education and placemaking given that the market district attracts more than 40,000 visitors every Saturday during the warm season. Because Eastern Market is a clearly defined district with a strong nonprofit development organization at the helm, it is also well-suited for a districtwide GSI strategy that considers stormwater solutions for the entire area, rather than parcel-by-parcel. Along the same lines, a management entity that oversees the implementation and maintenance of districtwide green stormwater infrastructure in the Eastern Market District is key. Districtwide GSI strategies and a corresponding management structure will benefit both property owners and the district at large in terms of cost savings and environmental improvements. As a destination for food-oriented businesses, the Eastern Market District has the potential to become a model for 21st century redevelopment in part by championing the innovative renewal of infrastructure in the district, starting with stormwater management.

Benefits
GSI is an effective and sustainable approach to addressing the environmental issues of stormwater management in the district. The benefits to implementing a districtwide stormwater infrastructure strategy in the Eastern Market District include cost savings and clean water as well as a range of other Triple Bottom Line advantages included below:

• Districtwide solutions: Eastern Market can be a library for green infrastructure and a model for solving stormwater concerns at the district scale, setting a precedent for a high-capacity nonprofit supporting the management of district stormwater management facilities.
• Detroit Water & Sewerage Department: This districtwide stormwater management approach can also benefit Detroit Water and Sewerage Department by reducing its long-term treatment and facility costs and by showcasing model green infrastructure practices.
• Development Incentive: A districtwide stormwater management service is an enticement for businesses locating in the Eastern Market area, as are the cost savings associated with a district GSI approach, which would reduce drainage charges for property owners.
• Economic Development: Sustainable infrastructure improvements support economic development and create green jobs ranging from construction to maintenance staff.
• Property values: Property values will increase as green infrastructure improves the district’s aesthetic appearance, enhances the quality of life, and reduces drainage charges for property owners.
• Placemaking & Public Education: Green stormwater interventions will further enhance the public market experience with high-performance green spaces that are intended for education as well as recreation.
• Environment: Property owners and public entities investing in green stormwater infrastructure contribute to improved water quality for all.
Eastern Market Green Stormwater Management Strategy

District Management Scenarios

There are several scenarios for district-based green stormwater management in the Eastern Market area, which can be compared against the current baseline: no districtwide management system and increasing drainage charges being assessed and collected. Options include the Eastern Market Corporation managing water on the properties they currently oversee or, per the recommendation of this report, expanding out to a stormwater management district, which would manage combined GSI strategies that meet the needs of the entire existing district and/or proposed food innovation district. A proposed district management structure and analysis are included in this section.

1. **DO NOTHING**
All properties pay individual drainage charges based on their amount of impervious area and implemented stormwater controls.

2. **EMC MANAGES STORMWATER FOR THE PUBLIC MARKET CORE**
EMC can manage stormwater on its own properties and reduce runoff entering the combined sewer system. This would be environmentally responsible as well as educational, but will not create a new districtwide management system for addressing stormwater concerns across properties. Area: 20 acres, 7 properties (city-owned and EMC-managed).

3. **EASTERN MARKET STORMWATER MANAGEMENT DISTRICT**

   **A. EMC manages stormwater for the Existing District**
   The existing Eastern Market District offers many opportunities for green stormwater improvements. Interventions here may not achieve maximum collection potential but offer opportunities for demonstrating sustainable stormwater strategies, which should be included in all development in the Eastern Market District. Area: 245 acres, 418 properties.

   **B. EMC manages stormwater for the proposed Food Innovation District**
   New development to the northeast of the existing Eastern Market footprint has immense potential for integrating sustainable stormwater strategies, which should be included in development standards for the area. This may include offsets for stormwater originating in the existing district and generate substantial savings for reducing runoff entering the combined sewer system. EMC can administer, facilitate, and manage stormwater management in the area. Area: 217 acres, 968 properties.

   **C. EMC manages stormwater for the Combined District**
   A stormwater management district for the entire area, including new and existing properties, will offer educational and stewardship opportunities in the existing market district while collecting a large volume of stormwater from new developments. Preliminary analysis for how much stormwater could be managed is included here. Which properties benefit and where water is collected needs further development as projects come on line. Considered as a combined district, maximum catchment in the proposed district can offset projects with limited collection potential in the existing district. A management entity that oversees drainage charges and green infrastructure planning and implementation would provide a valuable service. Area: 462 acres, 1386 properties.
Eastern Market Green Stormwater Management Strategy

Proposed Management Structure

It is recommended that Eastern Market Corporation develop an agreement with the Detroit Water and Sewerage Department and property owners to serve as a management entity to fund, implement, and maintain GSI projects in the stormwater district. Property owners would benefit from a district-based charge reduction while EMC would receive a portion of the stormwater drainage charges to administer the stormwater district. A proposed district structure is outlined below, but requires further development.

- Capital funders provide grants and low interest loans to support GSI implementation. Partnerships may include public-private ventures. Funders may be local or national.
- DWSD may provide funding as well as institutional support for project design and implementation. GSI projects should align with municipal and utility goals that comply with CSO requirements.
- The management organization develops an agreement with DWSD and property owners to implement and maintain GSI projects. This entity collects charges, fundraises, oversees implementation and maintenance, and in return receives a portion of stormwater drainage charges.
- Property owners agree to have their properties outfitted to manage stormwater and participate in a districtwide strategy. In return their drainage charges are reduced and the district enhanced.

Pros & Cons for District Management

ADVANTAGES:
- Districtwide GSI strategies provide a model for sustainable redevelopment that reduces lifecycle costs of building development and sets a standard for development in the area.
- More stormwater runoff collection and drainage charge savings will result from a districtwide approach to water management.
- District support and a managing entity for GSI strategies is an added incentive for businesses deciding where to locate in Detroit.
- Green infrastructure will contribute to the beautification and identity of the district.
- Eastern Market can be a model for green stormwater infrastructure at the district scale and provide educational opportunities.
- DWSD benefits from an intermediary who manages stormwater concerns in the district as well as from cost and energy savings associated with reducing the amount of stormwater entering the combined sewer system.
- Overall costs for stormwater management are reduced through economies of scale.

DISADVANTAGES:
- The managing organization bears a large and unprecedented responsibility including fundraising, maintenance and district relations.
- The payback period for GSI in the existing district is long. Return on investment analysis must include other factors such as development potential and district placemaking.
**Eastern Market Green Stormwater Management Strategy**

**District Proposals + Recommended District Strategies**

**Eastern Market Public Core**

**Suggested Strategies:**

- **Parking Lots:** Making green infrastructure improvements to the two northern parking lots will enhance the visitor experience, catch ample storm runoff including runoff from public streets and contribute to the overall beautification of the district, setting an example for other similar projects. Other EMC-managed lots could also collect runoff.

- **Small Existing Green Spaces:** Revamping the small green space adjacent to the EMC offices can provide a playscape as well as stormwater management. The playscape, rain garden and cistern could illustrate a range of green infrastructure options. An additional green space should be located elsewhere in the adjacent parking lot to capture remaining runoff from the lot and regrading should incorporate runoff opportunities.

**Rooftops:** Water can and should be captured from the shed rooftops with cisterns; rain gardens or a combination of both. This is a placemaking and educational opportunity.

**Shed 4 & Parking Garage:** Green stormwater infrastructure should be integrated into the design and development of Shed 4, which can also catch runoff from the adjacent parking garage. This is a prime opportunity to model best development practices.

- Total possible catchment area: 18 acres
- Total estimated current drainage charge: $10,200/month
- Total estimated savings with 100% catchment: $4,700/month
- Approximate green infrastructure costs: $514,500

**Existing Eastern Market District**

**Suggested Strategies:**

- **Parking Lots & Roof Tops:** As in the public core, parking lots and rooftops offer visible and relatively easy ways to capture runoff through rain gardens; and in some cases, cisterns. In the dense older part of the market, cisterns may make more sense to capture roof runoff that can be reused. When space allows, rain gardens can complement cistern catchment.

- **Alleways:** Alleways offer an innovative way to combine public and private runoff opportunities. Alleys can capture runoff from the alley footprint as well as adjacent rooftops, while still allowing traffic to pass. This is a visible and unique placemaking opportunity.

- **Large Properties:** The implementation of GSI on larger industrial properties can be a large-scale intervention at a lower cost. These properties manage public runoff on site, they may benefit from drainage charge savings. In either case, streetscape improvements will greatly enhance the district.

- Total possible catchment area: 245 acres
- Total estimated drainage charge: $138,500/month
- Total estimated savings with 100% catchment: $63,700/month
- Approximate green infrastructure costs: $7,470,540

**Combined District**

**Recommended District Strategy**

- **Suggested strategies include a combination of those previously described for the following Eastern Market District site conditions:**

  **Parking Lots**

  - Small Existing Green Spaces

  - Shed 4 and Parking Garage

  - Rooffops

  - Alleways

  - Public Right-of-Way

  - Large Properties

  - Building Rehabilitation Projects

  - Contiguous Vacant Properties

- Estimated drainage charge: $261,100/month
- Estimated savings with 100% catchment: $120,100/month
- Approximate green infrastructure costs: $14,087,304

**Proposed Food Innovation District**

**Suggested Strategies:**

- **Building Rehabilitation Projects:** Building rehabilitation projects along the Dequindre Cut and elsewhere offer opportunities for sustainable stormwater management as part of an integrated urban design that includes building reuse. Combined, green infrastructure associated with building rehabs can set an example for a district approach to catchment, resulting in decreased costs, increased savings and a more intentional public space around green infrastructure interventions.

- **Contiguous Vacant Sites:** Undeveloped sites to the northeast of the existing district offer many opportunities for shared stormwater management strategies. Future development can be designed for maximum water catchment and drainage charge savings and contribute to a major public amenity and recreation space, providing an example for the city that ties into a larger open space plan.

- Total possible catchment area: 217 acres
- Estimated drainage charge: $122,600/month
- Estimated savings with 100% catchment: $56,400/month
- Approximate green infrastructure costs: $6,616,764

**Summary:**

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Phasing Strategy
Limited resources require a layered and phased approach to the implementation of green infrastructure strategies in order to achieve a districtwide green stormwater infrastructure plan in the Eastern Market District. In general, it is recommended that the implementation of green infrastructure strategies begins in the Public Market Core due to EMC’s control of the properties in this area, while incremental efforts should also be made to implement strategies in the comprehensive Combined District, an approach that would have larger environmental and economic impact. Also likely is the simultaneous implementation of these strategies in a combination of areas as development and funding opportunities arise. Additionally, implementation should be phased according to the Eastern Market Corporation’s strategic planning goals for the district in an effort to layer and leverage opportunities and funding. Development standards and green infrastructure metrics, not included in this scope, should also be defined and implemented to ensure the success of the green stormwater infrastructure district.

Financing and Partnership Opportunities
There are multiple partners and funding sources that can be utilized to implement the Eastern Market Green Stormwater Infrastructure Strategy. These sources and tools have been identified on federal, state, and local levels. It is recommended that a layered approach of public-private resources and partnerships be used to implement the proposed GSI strategies and districts. These resources complement the savings associated with drainage charge reductions, contributing to overall project feasibility, and could include the following:

Detroit Water and Sewerage Department:
DWSD is currently developing a drainage charge system that will include savings for on-site stormwater management. DWSD is also a potential funder for GSI project costs. All of these strategies would offer incentives for a district-wide approach.

Combined Sewer Overflow (CSO) Permit:
The City of Detroit’s Long-Term CSO Control Plan is embodied in the National Pollutant Discharge Elimination System (NPDES) permit. This permit was renewed in 2013 to include green infrastructure provisions to reduce overflows in the Upper Rouge Tributary Area. As the permit comes up for renewal in 2017, there are opportunities to include green infrastructure for the Near East Side drainage area as well.

Environmental Protection Agency (EPA):
The EPA’s Office of Sustainable Communities helps communities make smart growth and sustainable design practices commonplace by providing research, publications, tools, grants, technical assistance, and cross-agency coordination. The Office also works with the Partnership for Sustainable Communities, an inter-agency partnership between HUD, DOT, and EPA with similar goals.

EPA Great Lakes Restoration Initiative (GLRI) Shoreline Cities Grant:
This grant funds green infrastructure projects in Southeast Michigan to improve water quality in the Great Lakes including preventing stormwater from carrying contamination into the Great Lakes. Cities can use the grants to cover up to 50 percent of the cost of rain gardens, bioswales, green roofs, porous pavement, greenways, constructed wetlands, stormwater tree trenches, and other green infrastructure measures installed on public property.

Eastern Market Targeted Redevelopment Area (TRA):
The Eastern Market District is working to create a Targeted Redevelopment Area, which would create a cluster of development and capital improvements in the market area through the use of a tax increment financing structure. Like TIF districts, the taxes generated by increases in property value over the next 25 years in the TRA area would go into a pool held by the Detroit Brownfield Redevelopment Authority and be used to reimburse property owners in the district for rehabilitating blighted property. Green infrastructure projects such as streetscape beautification and stormwater management would also be eligible for funding under this structure.

Private Development:
Private development, incentivized by the Eastern Market Targeted Redevelopment Area or otherwise, could fund and/or catalyze green stormwater infrastructure projects. There are numerous sites in the district that have been identified as opportunities for private development, including sites for new development and adaptive reuse.

Business Improvement District (BID):
A Business Improvement District could be established by property owners in the Eastern Market District as a special assessment district that funds a variety of services and public projects such as green infrastructure and stormwater management. This could be promoted as an “Environmental Improvement District” and act as the stormwater management entity.

Community Development Block Grants (CDBG):
The Community Development Block Grant (CDBG) program provides communities with resources through annual grants to address a wide range of unique community development needs. Specifically, the CDBG’s “Public Facility Rehabilitation” program could be a possible source of funding for green infrastructure projects in the Eastern Market District.

Transportation Alternatives Program (TAP) Funds:
TAP Funds provide funding for programs and projects defined as transportation alternatives, including infrastructure projects for improving nonmotorized transportation and enhanced mobility, community improvement activities, environmental mitigation, recreational trail projects, and projects for planning, designing, or constructing boulevards and roadways.

The Nature Conservancy:
The Nature Conservancy is a leading conservation organization working in Michigan and throughout the world to protect ecologically important lands and waters. Its new initiative, NatureVest, works to close the funding gap that exists by creating new opportunities to invest private capital in conservation projects that deliver financial returns and environmental benefits. Investors interested in a more sustainable impact from their capital can provide much needed financing for projects such as green infrastructure for municipal water supplies.

Fred A. and Barbara M. Erb Family Foundation:
The Erb Foundation funds efforts to improve water quality in the Great Lakes basin, especially the watersheds impacting metro Detroit, as well as efforts to promote human health and social equity in developing environmentally sustainable communities.

The Kresge Foundation:
The Kresge Foundation has been a generous supporter of development planning and stormwater management research and planning for the Eastern Market District. There may be opportunities to continue this relationship through the foundation’s various Detroit investment areas.

Placemaking Grants:
There are a variety of national and local grants available to fund placemaking projects, which could include green infrastructure. National organizations that fund placemaking include the National Endowment for the Arts and ArtPlace. Local placemaking grants are currently available through the Knight Foundation and the Community Development Advocates of Detroit (CDAD), among others.
Eastern Market Green Stormwater Management Strategy

IMPLEMENTATION RECOMMENDATIONS

Policy Recommendations
There are a number of policy recommendations that are critical to the success of the Eastern Market Green Stormwater Infrastructure Strategy and have implications for the City of Detroit and DWSD. They include the following:

**Take a district approach to stormwater runoff.**
It is recommended that a district approach to DWSD's handling of stormwater runoff is developed and implemented as opposed to the parcel approach that is currently used. This collective approach provides numerous environmental and economic benefits for DWSD, property owners, and the Eastern Market District.

**Create a drainage charge system that recognizes stormwater management on site.**
It is recommended that DWSD implement a drainage charge system that results in reduced charges when stormwater runoff is managed on site. This should also include additional reductions for managing runoff from public rights of way on private properties.

**Include the Eastern Market District in the 2017 CSO permit.**
It is recommended that the Eastern Market District and near East Side drainage area be included in the 2017 CSO permit renewal whereby allowing the area to be a pilot for GSI projects and districtwide stormwater management implementation.

**Revise the City of Detroit’s design and construction standards.**
It is recommended that the City of Detroit revise its design and construction standards, such as for parking lots, to accommodate green infrastructure strategies.

**Next Steps**
This report is limited in scope and provides an introductory look at the feasibility of key GSI interventions in the Eastern Market. Additional design, outreach, and site-specific analysis are necessary for the proposed strategies, as described in the following recommended next steps:

**Facilitate a districtwide engagement process to gain feedback on the Eastern Market Green Stormwater Management Strategy.**
An engagement process should be completed to gain input on this strategy from district businesses and property owners as well as other interested stakeholders. A workshop with major developers and property owners is recommended as a follow-up to this report.

**Include the Eastern Market Stormwater Management Strategy in the forthcoming Eastern Market 2025.**
Eastern Market is embarking on a revised development strategy to guide development in the Eastern Market District over the next decade. These stormwater management recommendations should be incorporated into that effort and plan.

**Complete additional site-specific analysis and design for the proposed GSI strategies.**
Further site-specific analysis and design should be completed for the proposed green infrastructure strategies. This analysis and design could be incorporated into the forthcoming Eastern Market 2025 strategic plan. Confirm possible GSI projects and locations before any additional design and development in the Eastern Market District proceeds in order to ensure that responsible stormwater management accompanies any new project.

**Work with DWSD to develop the Eastern Market stormwater management entity.**
The Detroit Water and Sewerage Department should advise on the development of the Eastern Market stormwater management entity including its organization and funding mechanisms.

**Seek funding and partnerships for the implementation of the Eastern Market Green Stormwater Management Strategy.**
Eastern Market Corporation should share this strategy with the previously mentioned partners and work with them to help implement and fund the Eastern Market Green Stormwater Management Strategy.

**Define development standards and green infrastructure metrics.**
Development standards and green infrastructure metrics, not included in this scope, should also be defined and implemented by the City and/or DWSD to ensure the success of the green stormwater infrastructure district.

References
Banking on Green: A Look at How Green Infrastructure Can Save Municipalities Money and Provide Economic Benefits Community-wide. American Rivers, the Water Environment Federation, the American Society of Landscape Architects, ECONorthwest, April 2012.
District-Scale Green Infrastructure Scenarios for the Zidell Development Site, City of Portland, Environmental Protection Agency, August 2013.

Eastern Market Green Stormwater Management Strategy

IMPLEMENTATION RECOMMENDATIONS

Policy Recommendations
There are a number of policy recommendations that are critical to the success of the Eastern Market Green Stormwater Infrastructure Strategy and have implications for the City of Detroit and DWSD. They include the following:

**Take a district approach to stormwater runoff.**
It is recommended that a district approach to DWSD’s handling of stormwater runoff is developed and implemented as opposed to the parcel approach that is currently used. This collective approach provides numerous environmental and economic benefits for DWSD, property owners, and the Eastern Market District.

**Create a drainage charge system that recognizes stormwater management on site.**
It is recommended that DWSD implement a drainage charge system that results in reduced charges when stormwater runoff is managed on site. This should also include additional reductions for managing runoff from public rights of way on private properties.

**Include the Eastern Market District in the 2017 CSO permit.**
It is recommended that the Eastern Market District and near East Side drainage area be included in the 2017 CSO permit renewal whereby allowing the area to be a pilot for GSI projects and districtwide stormwater management implementation.

**Revise the City of Detroit’s design and construction standards.**
It is recommended that the City of Detroit revise its design and construction standards, such as for parking lots, to accommodate green infrastructure strategies.

**Next Steps**
This report is limited in scope and provides an introductory look at the feasibility of key GSI interventions in the Eastern Market District. Additional design, outreach, and site-specific analysis are necessary for the proposed strategies, as described in the following recommended next steps:

**Facilitate a districtwide engagement process to gain feedback on the Eastern Market Green Stormwater Management Strategy.**
An engagement process should be completed to gain input on this strategy from district businesses and property owners as well as other interested stakeholders. A workshop with major developers and property owners is recommended as a follow-up to this report.

**Include the Eastern Market Stormwater Management Strategy in the forthcoming Eastern Market 2025.**
Eastern Market is embarking on a revised development strategy to guide development in the Eastern Market District over the next decade. These stormwater management recommendations should be incorporated into that effort and plan.

**Complete additional site-specific analysis and design for the proposed GSI strategies.**
Further site-specific analysis and design should be completed for the proposed green infrastructure strategies. This analysis and design could be incorporated into the forthcoming Eastern Market 2025 strategic plan. Confirm possible GSI projects and locations before any additional design and development in the Eastern Market District proceeds in order to ensure that responsible stormwater management accompanies any new project.

**Work with DWSD to develop the Eastern Market stormwater management entity.**
The Detroit Water and Sewerage Department should advise on the development of the Eastern Market stormwater management entity including its organization and funding mechanisms.

**Seek funding and partnerships for the implementation of the Eastern Market Green Stormwater Management Strategy.**
Eastern Market Corporation should share this strategy with the previously mentioned partners and work with them to help implement and fund the Eastern Market Green Stormwater Management Strategy.

**Define development standards and green infrastructure metrics.**
Development standards and green infrastructure metrics, not included in this scope, should also be defined and implemented by the City and/or DWSD to ensure the success of the green stormwater infrastructure district.

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