



THE CITY OF PHILADELPHIA
— OFFICE OF —
SUSTAINABILITY



EASTWICK: FROM RECOVERY TO RESILIENCE

A Place-based Framework for
Environmental Justice and Climate Resilience

[PHILA.GOV/PROGRAMS/EASTWICK-FROM-RECOVERY-TO-RESILIENCE](https://phila.gov/programs/eastwick-from-recovery-to-resilience)

TERMINOLOGY & DEFINITIONS

ENVIRONMENTAL JUSTICE

The City of Philadelphia Office of Sustainability (OOS) defines **environmental justice (EJ)** as:

- The equitable distribution of environmental benefits (e.g., affordable utilities, transit, green space) and burdens (e.g., pollution, waste, hazards)
- Redress or righting of past harmful environmental policies and practices; and
- Meaningful involvement of residents – particularly those most impacted and that have been historically marginalized – in decision making.

CLIMATE RESILIENCE

Climate resilience is distinct from climate adaptation, which is a process to change, avoid, minimize, adjust to and recover from the effects of climate change, ensuring survival and avoiding harm in a new environment.

OOS defines **climate resilience** as the capacity of social, economic and environmental systems to cope with climate impacts, whether in the form of chronic stresses or acute shocks, by responding and reorganizing in ways that maintain their essential functions, identity, and structure while also maintaining the capacity for adaptation, learning, and transformation.

WHAT DOES IT MEAN TO BE "PLACE-BASED"?

A place-based strategy focuses on a set of complex issues a community faces and aims to tackle those issues in a comprehensive and cohesive way. Core principles of this approach include considering the history that has caused environmental harm and distrust, understanding the present context of how systemic racism persists, and empowering residents and local leaders to develop solutions towards a shared vision by building their capacity to lead and sustain collective action in advancing the community's goals toward revitalization.

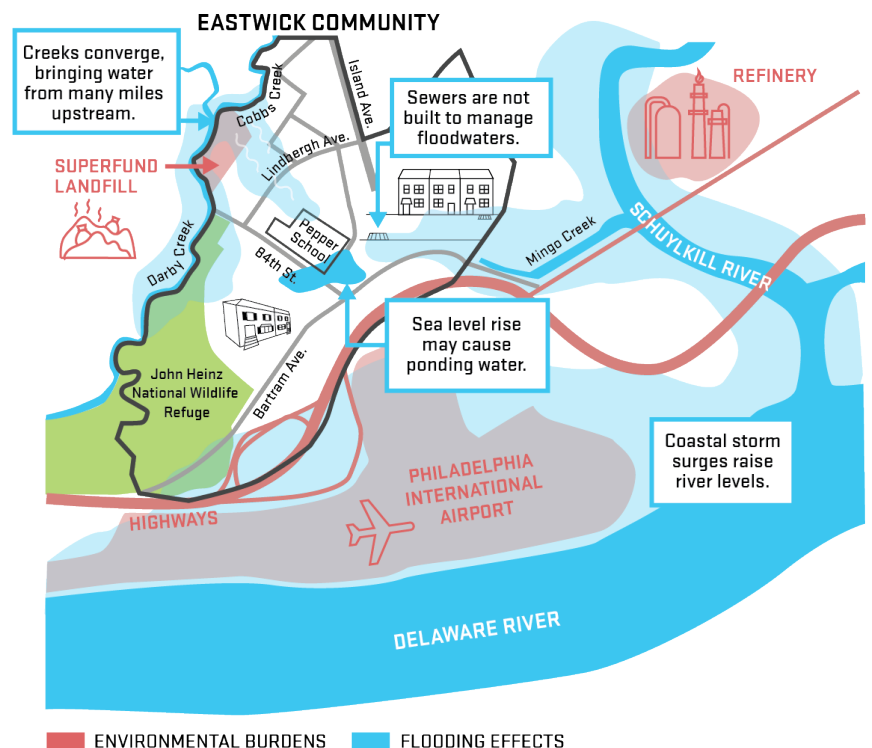
A place-based approach is achieved by bringing together multiple stakeholder groups and diverse funding sources, seeing this context from the residents' perspective and working with residents and local leaders to develop comprehensive solutions and address multiple issues at once, rather than focusing on a single issue or problem at a time. This requires taking a holistic and collaborative approach, rather than a siloed approach, to problem solving.

Place-based approaches are cyclical journeys that move at the speed of trust and rely heavily on relationship building. This can be uncomfortable and challenging for government, which have to meet deadlines, spending requirements and be able to report metrics and show progress. It also requires significant coordination and organization to bring together various projects and funding sources while being mindful of planning and engagement fatigue and minimizing duplication. At the same time, it is important to show results. Particularly for communities that have been "studied" for decades and have gone through countless planning and research exercises, having tangible outcomes is crucial to demonstrating one's intentions and is important for maintaining engagement and trust.

The Office of Sustainability's place-based program works with environmental justice communities that face a disproportionate risk to the impacts of climate change to co-develop climate resilience strategies. This program launched in earnest in the neighborhood of Eastwick in 2022 through an initiative called "Eastwick: from Recovery to Resilience".

"PLACE" IN CONTEXT: EASTWICK

Located in southwest Philadelphia, Eastwick is a prime example of a resilient environmental justice community. Eastwick faces multiple legacy and ongoing environmental burdens including a federally designated Superfund site (Clearview Landfill), the largest oil refinery on the Eastern Seaboard (now shuttered), and noise and air pollution from major highways (I-95 and I-76) and the Philadelphia International Airport. The scars of a failed urban renewal project from the late 1950s permeate today through large swaths of vacant land with unfinished roads and infrastructure leading to cement barriers and invasive vegetation, attracting short dumping and abandoned vehicles. The



EASTWICK: FROM RECOVERY TO RESILIENCE

most significant environmental challenge in Eastwick is flooding; Eastwick is one of the lowest lying areas in Philadelphia and has historically experienced severe riverine flooding. The Cobbs and Darby Creeks converge in Eastwick, carrying fast, forceful water from upstream. Tides bring water up the estuary from the coast, causing water levels to rise in the Delaware and Schuylkill Rivers, as well as in Darby Creek. If flood waters coming down from the Darby and Cobbs creeks happen the same time as high tide, it can make it harder for that water to drain and make the flooding worse; this condition will only worsen with sea level rise.



Climate change is already exacerbating the existing environmental burdens in Eastwick: In 2020, Tropical Storm Isaias devastated hundreds of properties in Eastwick, inundating homes with up to six feet of floodwater. These rainfall events are projected to intensify with climate change, with annual precipitation anticipated to increase by 3-6 inches by end of century. Paired with up to 3-5 feet of sea level rise by 2100, flooding in Eastwick is likely to become more frequent and catastrophic, putting more people at risk and contributing to psychological trauma for residents experiencing repetitive flooding.

Despite its historical and ongoing challenges, Eastwick today is a charming and unique neighborhood with quiet, tree-lined streets, creating a suburban feel while maintaining urban density with attached homes. Eastwick

borders the John Heinz National Wildlife Refuge, the nation's first urban wildlife refuge, is transit accessible by trolley and regional rail lines, and through its history of activism and community building, has a robust network of engaged neighbors committed to improving quality of life in Eastwick.



BEST PRACTICES

Through OOS' engagement in Eastwick, we continue to learn and iterate on our process and engagement strategy. The best practices below reflect how we have approached this place-based initiative in Eastwick, through every place is unique and requires a unique approach.

1 ENGAGE EARLY

This type of initiative requires a strong community partner. It will take time to establish relationships, and to understand the lay of the land and historical context. Engagement should take place before initiating a planning process to ensure interest, capacity, and start to fill resource gaps before the planning and visioning process can start.

2 FOCUS DIVERSE FUNDING AND PROGRAMS TO DELIVER A WHOLE-OF-GOVERNMENT APPROACH.

Break down government silos by regularly engaging partners across different levels of government.

- Dedicate staff to coordinate across government agencies and with community partners.
- Understand and work to address quality of life concerns by connecting residents to government agencies or services that may be lacking.
- Encourage different departments and partners to funnel engagement and communication through a collaborative and coordinated effort (i.e. a multi-agency town hall) to reduce engagement fatigue.

3 CENTER LOCAL KNOWLEDGE AND ENGAGE RESIDENTS IN CO-LEARNING.

From the [Communities First Principles](#), "Commit to centering communities' local wisdom and expertise, honoring that communities themselves are best positioned to meet community needs." Residents have lived

experience that can often be dismissed by government agencies. Yet there are knowledge gaps that government partners or other subject matter experts can help fill. Create avenues for two-way dialogue between residents and government partners.

[Climigration Network's Lead with Listening guidebook](#) contains helpful guidance for listening to communities facing climate risks:

- Center community members as experts
- Earn trust through: patience, honesty, respect, mutuality
- Consider culture, not just buildings
- Approach work in a trauma informed way. What has happened in the past matters
- Speak to the fear and anxiety
- Recognize power structures and analyze equity
- Use words that speak to people's everyday lives

4 EMPOWER RESIDENTS IN DECISION-MAKING.

Be clear and transparent about how decisions are made and where there is opportunity for residents to weigh in or make decisions themselves

- Participation is not the same as decision making. People may not just "want a voice", they want to make decisions
- Set up a governance structure for decision making so residents know exactly what decisions they have a say in
- Utilize the [Movement Center's Spectrum of Community Engagement to Ownership](#) to articulate what role community members have in an engagement process

5 HAVE AN ACTION PLAN BUT BE FLEXIBLE TO ADAPT
on the fly according to the community's needs and immediate interests.

- Accountability is important: Communicate a plan of action yet be ready to change according to community feedback/suggestions
- Demonstrate progress and forward movement but be flexible to respond to community needs

6 CREATE MULTIPLE METHODS OF ENGAGEMENT
to ensure residents have a variety of ways to hear from you. This is important to reach people that may be intimidated to speak up in larger settings, or are not already engaged through existing means.



Flood Resilience information session with the US Army Corps of Engineers in October 2022. Source: Office of Sustainability



One-on-one conversations at Eastwick Community Day, June 2023. Source: FEMA Region 3



Walking tour of potential trail with Eastwick residents, trail partners and city agencies. Source: Office of Sustainability



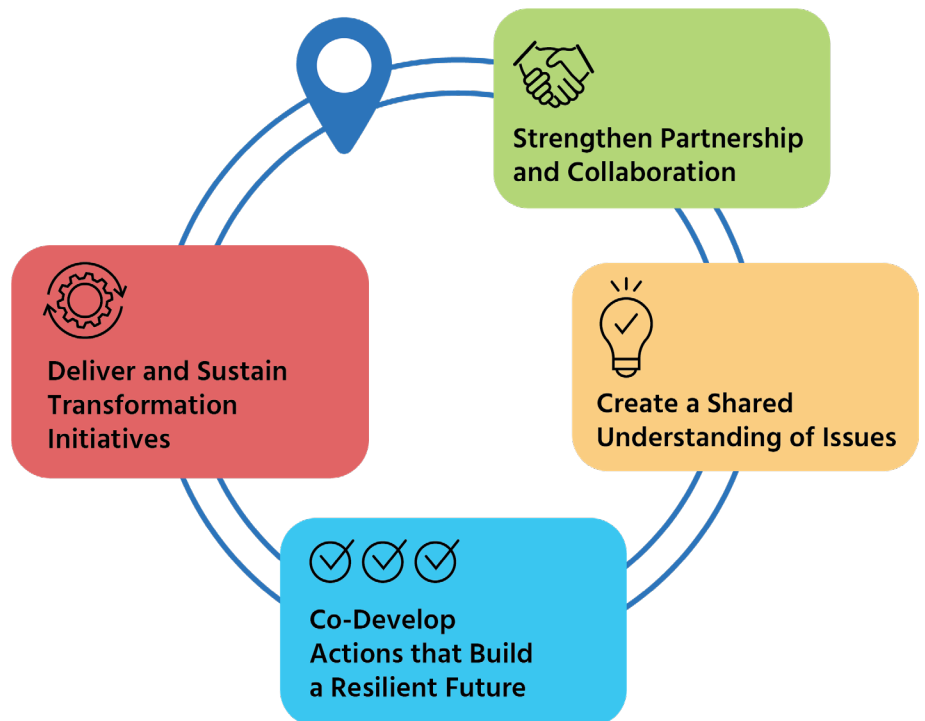
Eastwick stakeholder meeting in April 2023. Source: Office of Sustainability

PROCESS AND IMPLEMENTATION

In 2022, OOS launched our first formal place-based initiative to address flooding in Eastwick called Eastwick: from Recovery to Resilience. Even before this initiative formally kicked off, OOS was working with Eastwick organizations to understand the local context by:

- Listening to residents' concerns, resource gaps and ideas,
- Attending community meetings and events,
- Mapping out stakeholders and partners, and
- Establishing relationships with community leaders.

The initiative follows four guiding principles:





STRENGTHEN PARTNERSHIP AND COLLABORATION

Center community leadership by building capacity of community organizations.

- Support CBO time by sourcing unrestricted capacity building funding for organizations.
- Support leadership training led by CBO to onboard new membership (Eastwick Ambassadors – a program funded by Bloomberg Philanthropies J40 Capacity Building grant to recruit Eastwick residents to take on leadership positions in Eastwick organizations).
- Partner on grant applications and support organizations' funding applications.

Coordinate ongoing city efforts to reduce redundancy and streamline government communication pathways for Eastwick residents to increase transparency.

- Convene agency partners regularly to ensure all parties are aware of each others' work.
- Plan engagement collaboratively to avoid "engagement fatigue".

Revamp engagement to advance inclusion.

- Hire a Community Navigator to be a direct line of communication for residents and City government.
 - Raise quality of life concerns from residents to respective agencies.
- Follow the lead of CBOs and community leaders when it comes to community engagement.
 - When CBOs are capacity limited, ask for advice and check in on interest before initiating engagement.
- Create multiple methods of engagement to ensure residents have a variety of ways to connect directly with leadership and government partners. Our methods of engagement so far:

Quarterly town halls – these are large and less personal, but are held at a regular cadence so that residents can come to expect them and know they will have a quarterly touch point.

"Library chat" – open hours for small group or 1-1 conversations for any quality of life concern (not only flooding), especially for those who shy away from speaking up on zoom.

Info Sessions and Open Houses – intended to share updates, resources, and information for larger audiences.

Small group discussions – two way dialogues between residents and government staff around a particular initiative, service, or resource.

Community day – a family-friendly event to bring neighbors together in person for a block party and resource fair.

Door-to-door outreach at the property level to spark individual conversations.



CREATE A SHARED UNDERSTANDING OF THE ISSUES

Transform information into action.

- Evaluate opportunities for flood mitigation implementation (short term and long term).
- Use inclusive engagement process to develop actionable research projects.

Bridge information gaps.

- Partner with CBO to sponsor an independent technical panel to evaluate community-led flood mitigation concept.
- Advance comprehensive modeling of flood impacts and potential adaptation pathways in Eastwick.
- Coordinate with model developers from different studies/entities to come together around one comprehensive hydrologic and hydraulic flood model.
- Host co-learning workshops to dive into specific topics with residents (with lived experience) and subject matter experts (with learned experience).



CO-DEVELOP ACTIONS THAT BUILD A RESILIENT FUTURE

Build adaptive-capacity to near-term flooding through education and providing a pipeline to supportive services to build resilience at the neighborhood, household, and individual levels.

Build on the lived experience of residents to co-develop a toolkit of household level flood mitigation options, such as wet floodproofing and resilient retrofits.

Identify long-term community-driven/supported flood-mitigation solutions through co-design processes.



DELIVER AND SUSTAIN TRANSFORMATION INITIATIVES

Build partnerships for transformation.

- Establish community committee to facilitate shared decision making.
- Convene agency partners, elected officials, and other stakeholders to identify diverse funding streams and opportunities.

Secure implementation funding.

- Receive direct technical assistance from FEMA to support funding applications.
- Prepare funding applications for federal infrastructure funding and community capacity building funding.
- Ensure Eastwick projects are represented in Citywide Hazard Mitigation Plan (OEM) and Action Plan for Community Development Block Grant-Disaster Recovery funding from Hurricane Ida.

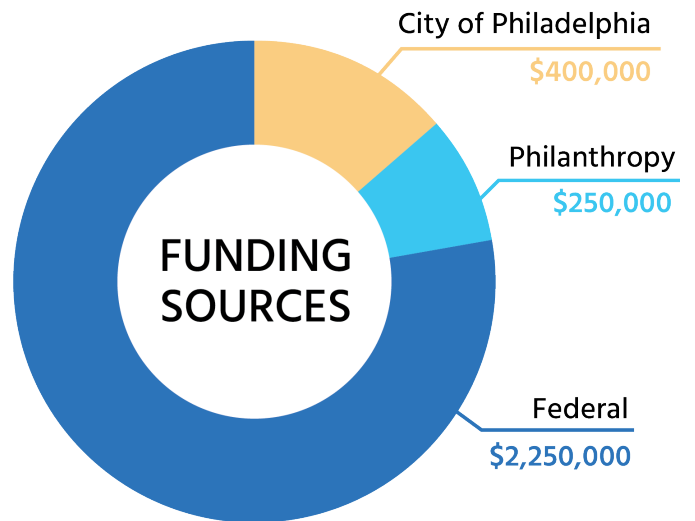
Accelerate near-term projects.

- Study, design, and secure funding for an interim flood barrier project to provide near-term relief.
- Support and seek flexible funding for flood resilient retrofits at the property level.

HOW ARE WE DOING?

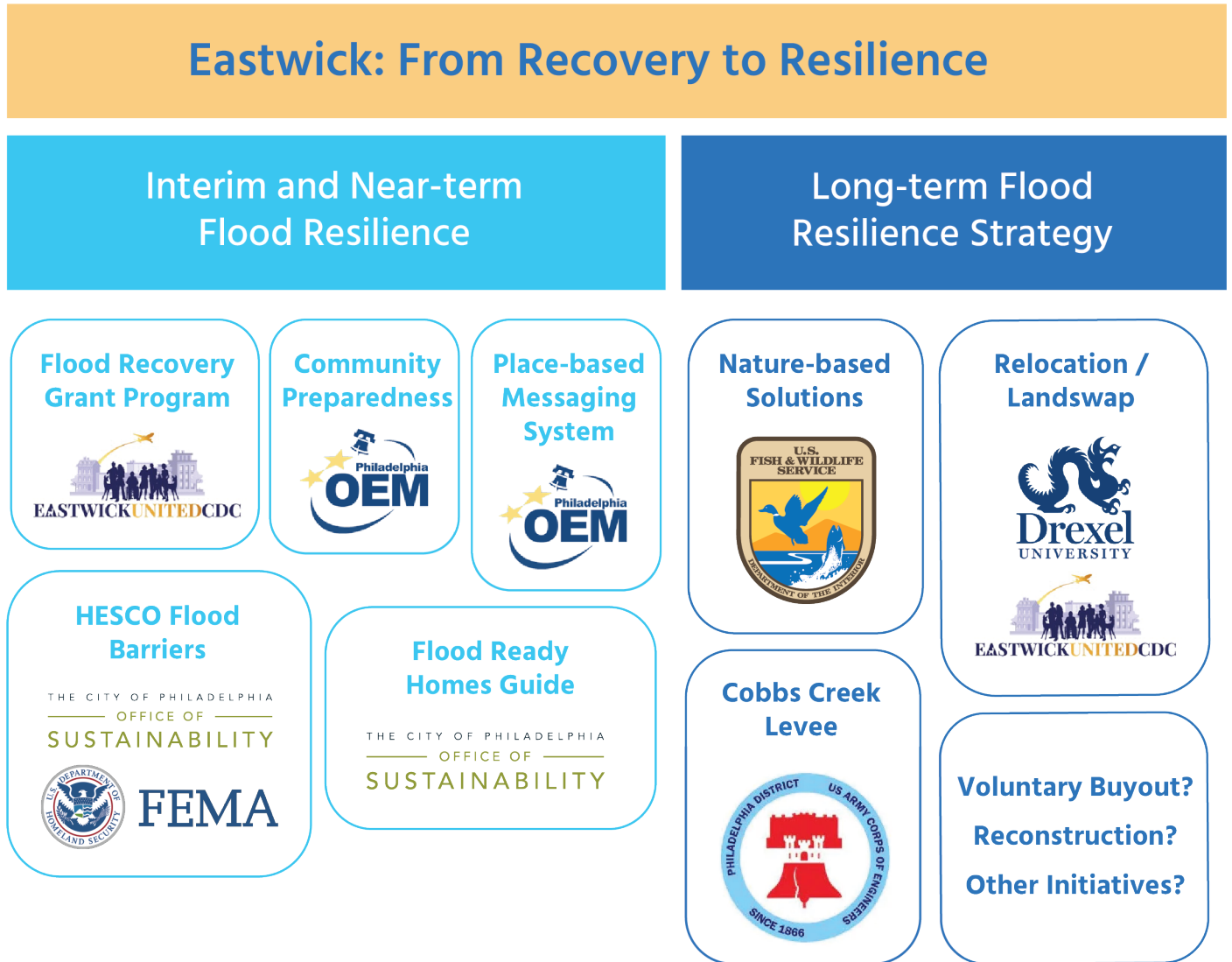
FUNDING

Seed funding from City and Philanthropic sources have built up internal and community capacity to apply for federal funding. A combined \$650,000 investment from the City and philanthropic sources has leveraged an additional \$2.25 million in funding from Federal sources towards recovery from past storms, capacity building, and long-term flood resilience planning, and implementing short-term flood resilience measures.



COORDINATION

OOS currently coordinates active and prospective projects among 30 local, state, and federal partner agencies, two community organizations, three academic institutions, two philanthropic organizations and two private consulting firms. A snapshot of the different flood resilience measures underway or under evaluation are captured in this graphic below:



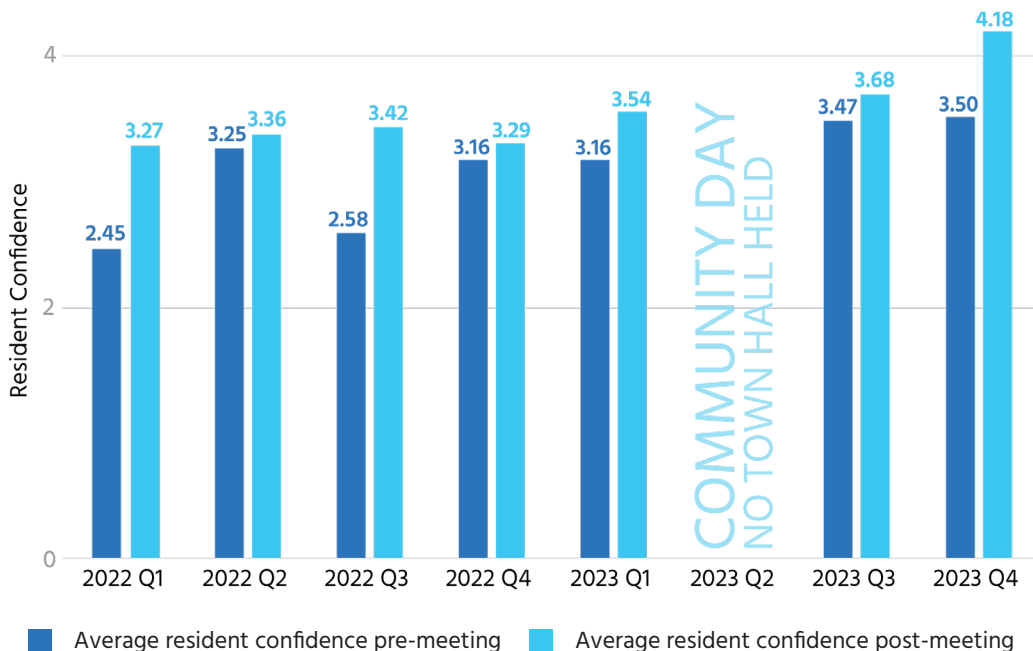


Photos from Eastwick Community Day in June 2023. Source:: FEMA Region 3

ENGAGEMENT

A paid committee of 11 residents representing different geographies, lived experiences, and organizations in Eastwick has been formed to advise on flood resilience measures. OOS regularly maintains multiple engagement methods, including quarterly town halls with regular attendance reaching ~75 participants, four in-person information sessions with >50 attendees and presentations from six agencies, ten “Library Chat” open discussions, six small group discussions co-hosted by four different agencies, and an inaugural Community Day event with over 250 attendees featuring resources from two dozen agencies or organizations.

Impact of Community Engagement on Residents’ Confidence in City’s Ability to Achieve Long-Term Solution to Flooding



As a barometer for building trust and confidence, at each Town Hall we ask at the beginning and the end of the meeting: “How confident are you in the City’s ability to achieve long-term flood resilience in Eastwick?”

THE ROAD AHEAD

Examples of other place-based approaches have taken upwards of 20 years to feel the impact. We have a long way to go! We have made major strides in building relationships with residents and partners but have yet to see the physical changes that are needed to heal this community and build long-term flood resilience.

While we strive to center community as an equal partner with government in designing and implementing an initiative, we are not there yet. There is still capacity building to do. We have a suite of paid government workers, whereas our community partners are still largely volunteer-based. Instead, we take our cues from community partners – ask for their advice and suggestions, while trying to minimize the time we ask for and compensate with stipend where possible.

We have made progress in bringing government partners coming to the table, but there are also some partners stuck in the status quo of poor communication and lack of collaboration, which hinders our work overall. Despite our best efforts to develop an umbrella that many initiatives can fit within, there are also entities that want to maintain their autonomy and work outside of our collaborative. We continue to strive towards a collaborative model that partners of various types can find value in and contribute positively towards.

There is exciting work ahead! OOS is receiving two federal grants to kick off a community-driven Flood Resilience Strategy effort (FEMA-funded) and build community capacity with funding for our partner CBO to hire one full-time and one part-time staff person (EPA-funded). The Flood Resilience Strategy aims to bring all of the different flood resilience concepts and partners into one dedicated planning process with Eastwick residents (through the recently formed community committee) steering decision making on how to move forward. Through engagement of community and agency stakeholders, technical feasibility analysis, and an options evaluation, the project will identify a community-supported preferred comprehensive flood resilience strategy, which will likely include multiple components that work together, and an implementation roadmap for Eastwick. This will be a two-year effort kicking



Example of HESCO barriers stacked and filled. Source: HESCO

off in 2024. The community capacity building funds will support the local community organization in staffing and grant writing, to ensure community leaders can participate in this planning process and grow their organization to continue to serve the needs of Eastwick residents.

Recognizing that flooding is an ever-present risk and residents are anxious every time it rains, OOS is also evaluating a near-term measure to provide interim relief to Eastwick households. OOS is working with federal partners to design and construct flood barriers using HESCO Floodline barriers – soil-filled boxes made of fabric mesh and a wire frame – connected to create a flood barrier. Funding for design and construction has been secured through Congresswoman Mary Gay Scanlon’s Congressionally Delegated Funds. The interim HESCO barriers would remain in place for up to 10 years to provide protection from small- to moderate- sized riverine flood events and give Eastwick residents some peace of mind and the freedom to imagine what a future flood resilient Eastwick could look like.



Tinicum boardwalk at the John Heinz National Wildlife Refuge. Source: Office of Sustainability

Inspiration for this framework comes from:

- The Movement Center’s [Community Driven Climate Resilience Planning](#)
- Spartanburg, NC: [Regenesis Institute](#) – A National Model of Environmental Justice and Community Revitalization Success
- City of Philadelphia’s [Equitable Community Engagement Toolkit](#)
- Climigration’s [Lead with Listening Guidebook](#)
- EPA’s [Environmental Justice Collaborative Problem Solving Model](#)
- Communities First [Principles](#)



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