



Eastwick: From Recovery to Resilience

Quarterly Meeting - March 28, 2024

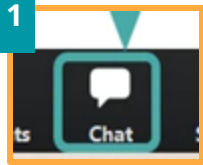


City of
Philadelphia

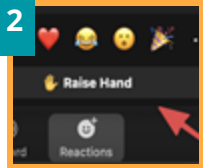
Zoom Functions

Please note:
This meeting will be recorded

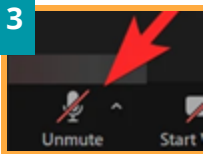
To ask questions:



Use the **chat** function to ask questions at anytime

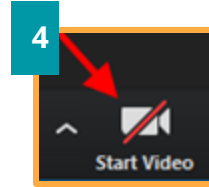


Use the **raise hand** function to ask verbally

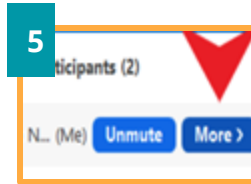


Click the **unmute** function to speak when called upon

If you prefer to remain anonymous:



Turn off your camera by clicking the **camera button** at the bottom of the zoom window



Change your name by clicking **participants**, and then clicking **more** next to your name OR clicking the **three dots** next to your name and selecting the 'change name' function from the drop-down menu



Ask questions anonymously by submitting them through the **direct message** option at the bottom of the chat window to **Taylor Quinland**.



Agenda

Introduction & Recap

Short Term Resilience Measures

Community Updates

OPEN FORUM

Long Term Resilience Measures

Announcements and Closing



Who's in the Virtual Room



FEMA



Eastwick Friends & Neighbors Coalition



THE CITY OF PHILADELPHIA
OFFICE OF
SUSTAINABILITY





Poll 1



Recap

What Are the Steps
To Reach Our Goal


**Deliver and
Sustain
Transformation
Initiatives**


**Co-Develop
Actions that Build
a Resilient Future**

**Eastwick:
from Recovery
to Resilience**


**Strengthen
Partnership and
Collaboration**



**Create a Shared
Understanding of the
Issues**

Eastwick: from Recovery to Resilience

Interim and Near-term Flood Resilience

Flood Recovery Grant Program



Place-based Messaging System



Community Preparedness



HESCO Flood Barriers

THE CITY OF PHILADELPHIA
OFFICE OF SUSTAINABILITY



Flood Ready Homes Guide

THE CITY OF PHILADELPHIA
OFFICE OF SUSTAINABILITY

Long-term Flood Resilience Strategy

Nature-based Solutions



Voluntary Buyout?
Reconstruction?
What else?

Cobbs Creek Levee



Relocation/
Landswap



Eastwick: from Recovery to Resilience

Interim and Near-term Flood Resilience

Flood Recovery Grant Program



Place-based Messaging System



Community Preparedness



HESCO Flood Barriers

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Reconstruction?
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Landswap





Interim and Near Term Resilience

Interim Flood Barriers

- An interim solution using HESCO Floodline barriers
- **Cost Estimate:** \$2.2 million
- **Timeline:** 2-3 years
 - Estimating construction complete 2027
 - Would remain in place for 5-10 years
- **Benefits:**
 - Preliminary flood modeling shows barriers would protect ~600 homes from moderate flood events
 - Faster implementation than other mitigation measures
 - Aligns with voiced community needs



Interim Flood Barriers

Considerations:

- Mitigation of induced flooding
- Lower level of protection than a levee
 - Emergency management and evacuations will still be necessary for large storms
- Evaluate the need for a replacement plan
- Management of construction and maintenance
- Aesthetic appeal and community engagement

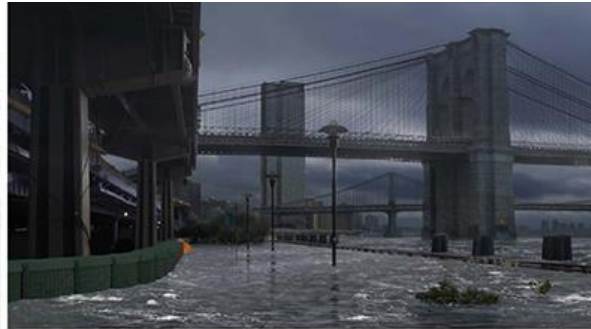


NYC Interim Flood Protection Program

- NYC has implemented multiple HESCO barrier projects throughout the city.
- Initiated after Hurricane Sandy to protect from coastal storm surge.



BLUE SKY RENDERING



STORM RENDERING

Partnership with Mural Arts Program



Current alignment (subject to change)



Next Steps

- OOS has submitted funding applications to:
 - FEMA Building Resilient Infrastructure and Communities (BRIC)
 - FEMA Flood Mitigation Assistance (FMA)
 - Congressional Delegated Spending, Pre-Disaster Mitigation – **funding update!**
- OOS will continue community and stakeholder engagement while awaiting funding



Eastwick Recovery to Resilience

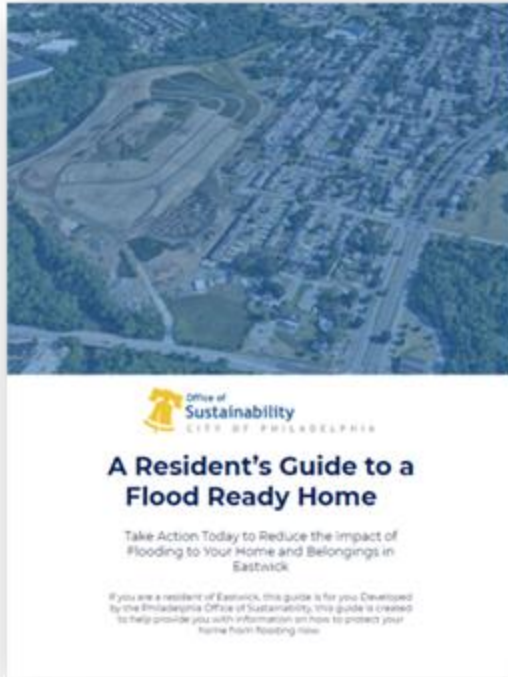
Flood Ready Home Guide



Office of
Sustainability

CITY OF PHILADELPHIA

Introducing: An Eastwick Resident's Guide to a Flood Ready Home



A new resource designed to:

- Help you better understand **where to start** and **what options are available** to take immediate action to keep your family safe and protect your home and belongings
- Provide three **“Flood Ready Home Strategies”** with steps to reduce the risk of flooding to your home




Please keep in mind...

What Purpose Is the Guide Intended to Serve?

- This Guide is intended to provide practical, near-term, relatively easy-to-implement steps you can take to reduce the potential for flooding to damage your home and to minimize your recovery period when it does occur
- These measures are intended to provide near-term benefits and backup protection while other long-term measures are being planned and constructed

What Purpose Is the Guide NOT Intended to Serve?

- This Guide is *not* intended to provide comprehensive solutions that will completely eliminate your risk of flooding, and does not replace the need for long-term, Eastwick-wide flood mitigation solutions
 - Implementation of measures within this Guide does not supplant the need to follow emergency preparedness and evacuations procedures if a flood is forecast
- 



What's Your Home Type?



Home Type A

Type A: Attached 3-Story Single Family Home with Garage and/or Living Space on Ground Floor



For Type A homes, all three Flood Ready Home Strategies described in this guide are potentially applicable, depending on individual circumstances and building conditions.

Home Type B

Type B: Attached 2-Story Single Family Home with Living Space on Ground Floor



For Type B homes, Flood Ready Home Strategy #1 is the most applicable strategy described in this guide, depending on individual circumstances and building conditions.

Home Type C

Type C: Detached and Semi-Detached 2-3 Story Single Family Home with Garage and/or Living Space on Ground Floor



For Type C homes, all three Flood Ready Home Strategies described in this guide are potentially applicable, depending on individual circumstances and building conditions. This is also the only type for which Structural Elevation may be feasible



What Are the Flood Ready Home Strategies?



Three Flood Ready Home Strategies



Strategy 1: Minimize the damage when flooding enters your home.



Strategy 2: If your structure allows it, reduce damage by keeping the water out.



Strategy 3: Follow FEMA best practices to reduce your risk and insurance premiums.

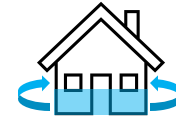
Which Strategy Is Right for Your Home Type?



Strategy #1



Strategy #2



Strategy #3

Home Type A















Home Type B



Home Type C



Which Strategy Is Right for Your Home Type?

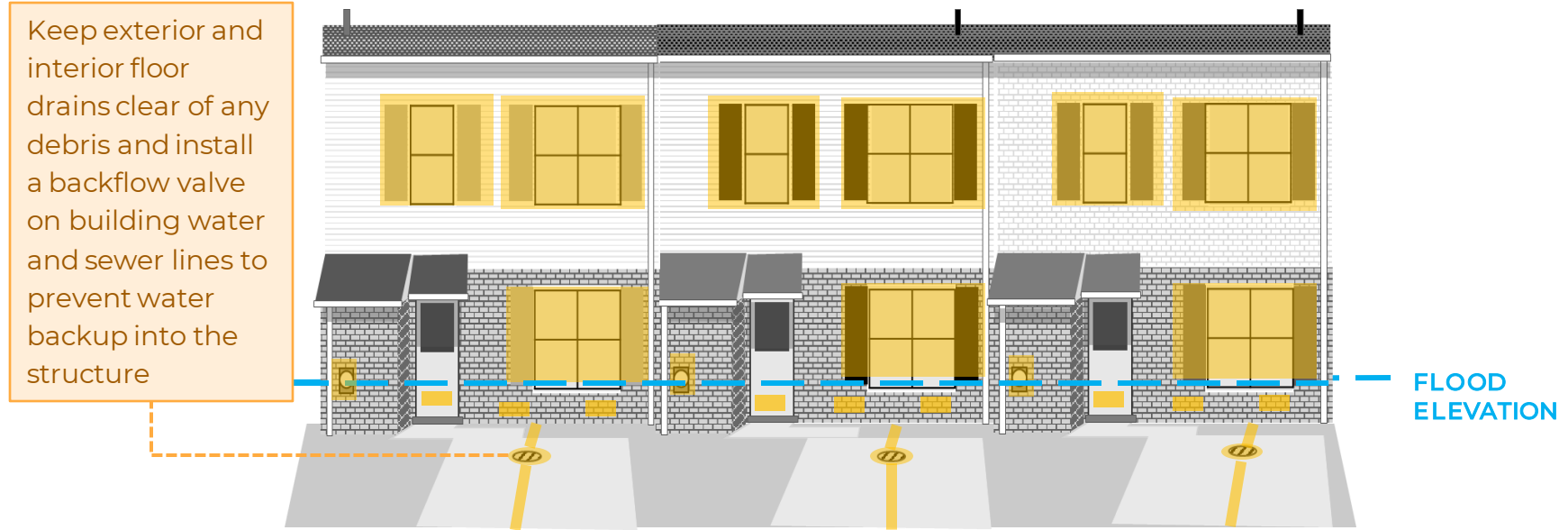
	 Strategy #1	 Strategy #2	 Strategy #3
Home Type A			
Home Type B			
Home Type C			

Strategy #1: Minimize the Damage When Flooding Enters Your Home



Strategy #1 Diagram: Illustrated on Home Type B but also applicable to Home Types A and C

Strategy #1: Minimize the Damage When Flooding Enters Your Home



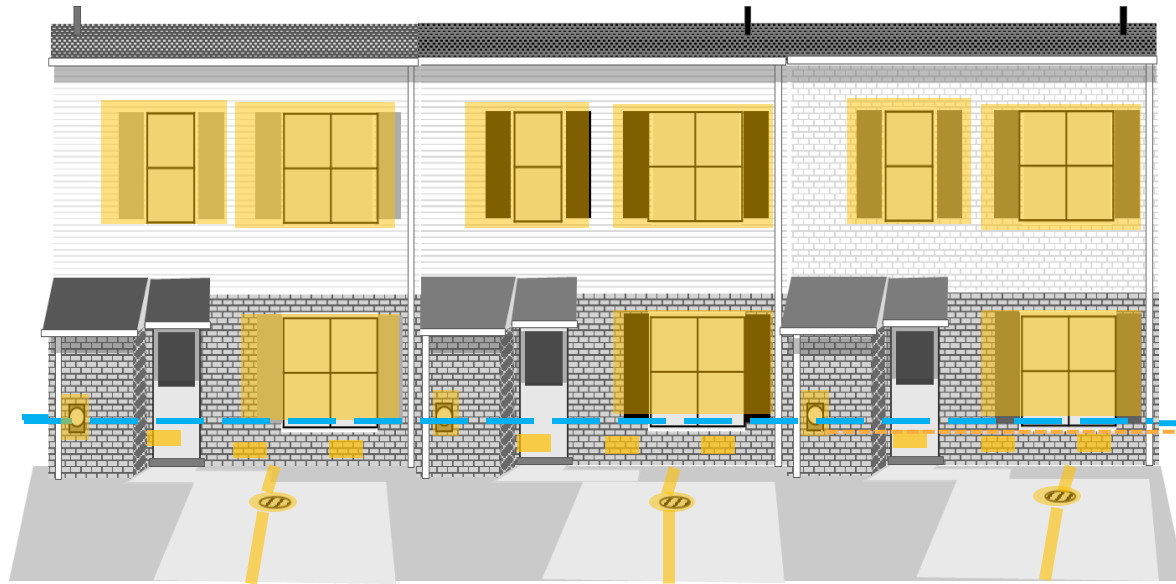
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Strategy #1: Minimize the Damage When Flooding Enters Your Home



Strategy #1 Diagram: Illustrated on Home Type B but also applicable to Home Types A and C

Strategy #1: Minimize the Damage When Flooding Enters Your Home



Protect appliances in flood vulnerable areas with high strength, watertight, flood-resistant utility enclosures or elevate utility or appliance (if possible)

Strategy #1 Diagram: Illustrated on Home Type B but also applicable to Home Types A and C

Strategy #1: Minimize the Damage When Flooding Enters Your Home

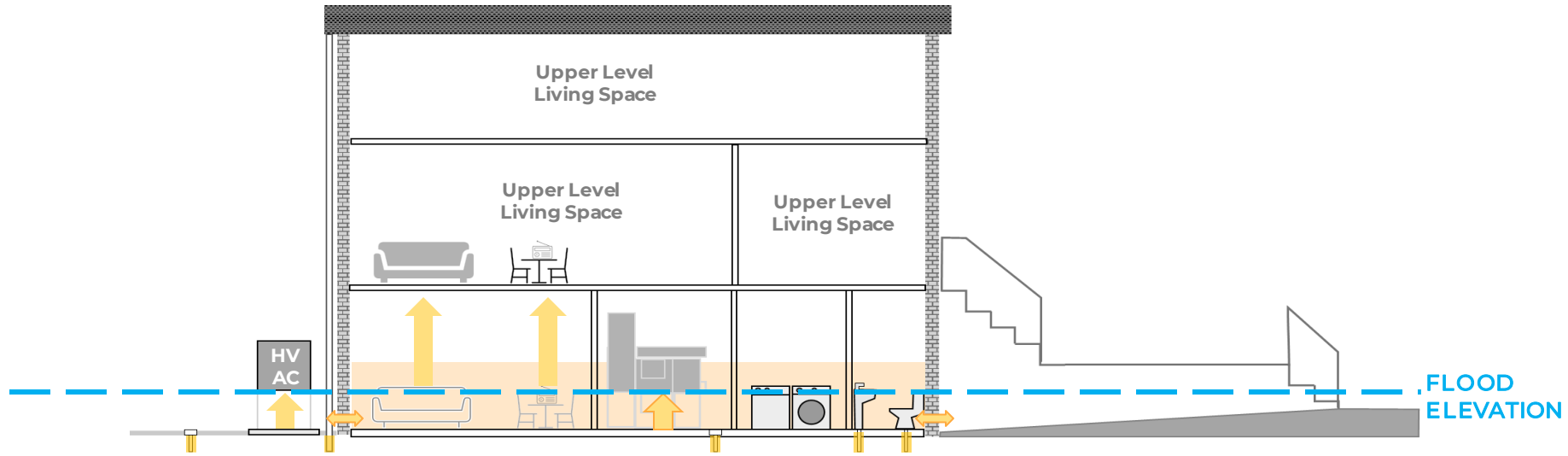
Install flood vents, which are small openings in the lower floor walls and doors, to allow floodwaters to flow through and drain out, and minimize hydrostatic pressure on your home



Protect appliances in flood vulnerable areas with high strength, watertight, flood-resistant utility enclosures or elevate utility or appliance (if possible)

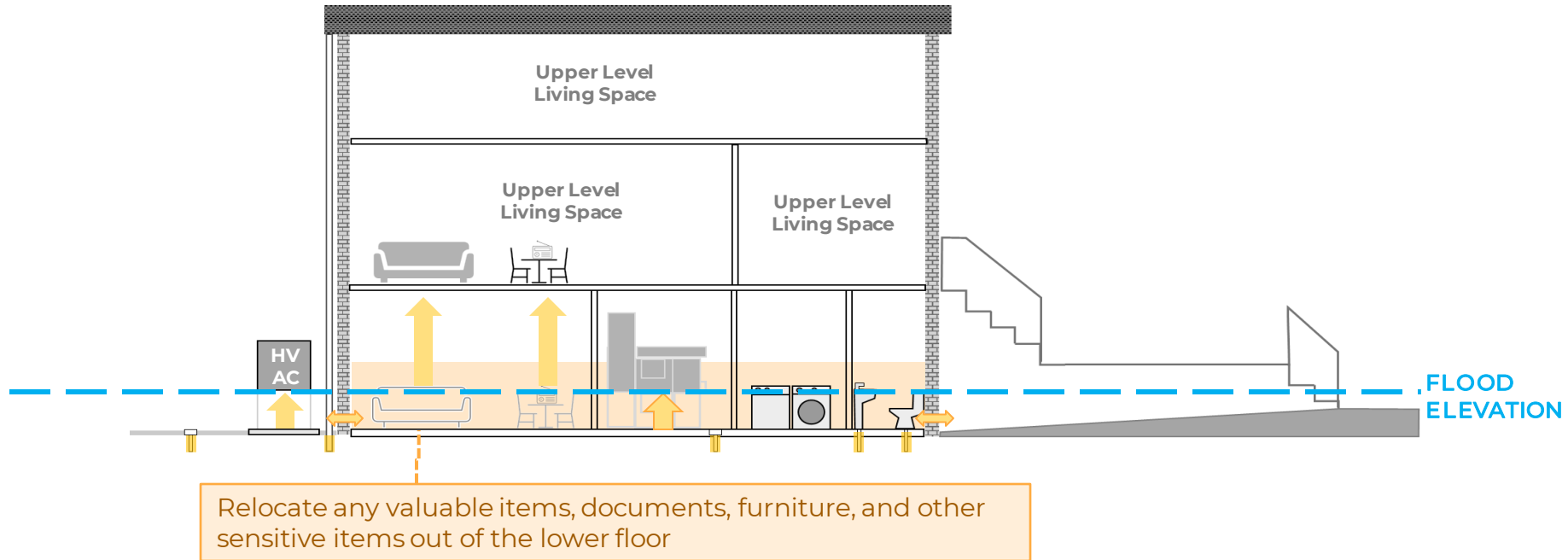
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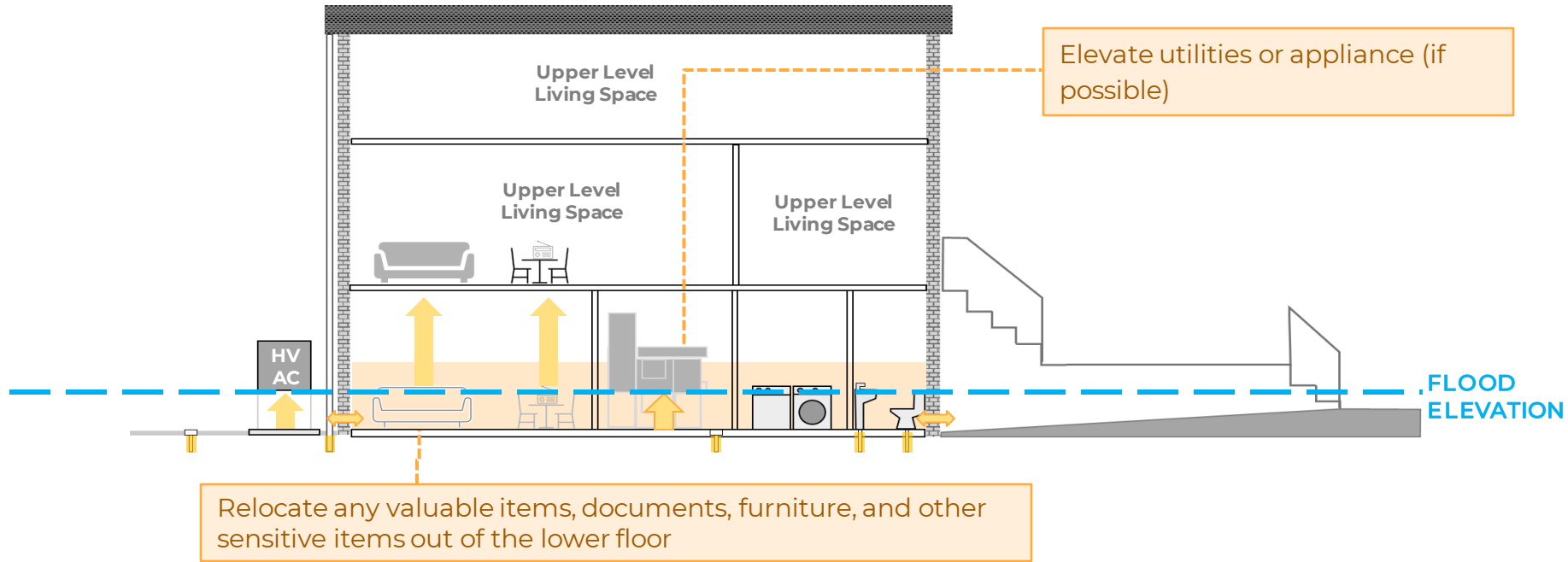
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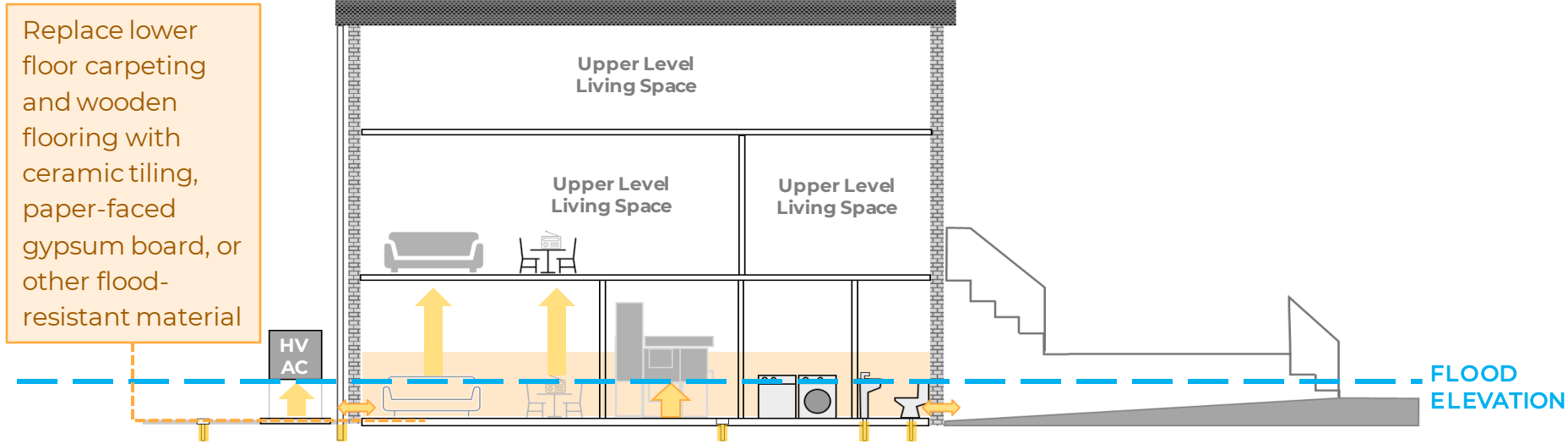
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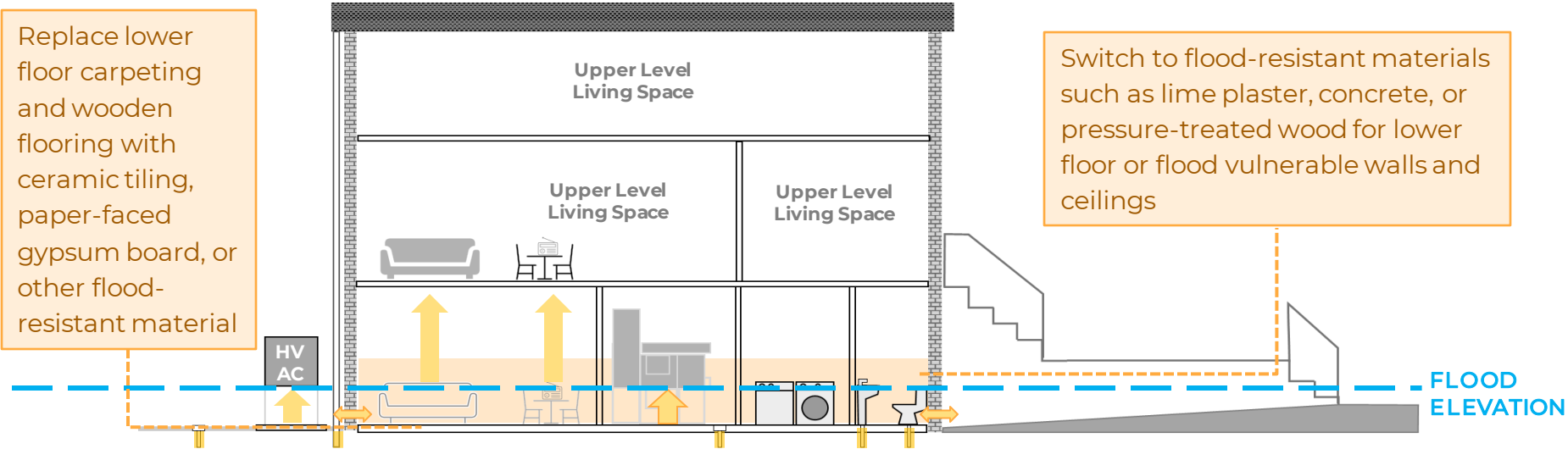
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Strategy #1: Minimize the Damage When Flooding Enters Your Home



Strategy #1 Diagram: Illustrated on Home Type B but also applicable to Home Types A and C

What To Do Next?

Reach out to the Philadelphia Office of Sustainability to learn about assistance that may be available.

Korin Tangtrakul

Program Manager of Place-Based Initiatives, Office of Sustainability, City of Philadelphia

(215) 683-1795

Eastwick@phila.gov

- ✓ Talk to a qualified professional about your options
- ✓ Learn from your neighbors
- ✓ Consult the list of local, state, and national resources



www.phila.gov/media/2023-1214151437/Eastwick-resident-flood-ready-home-guide.pdf



Q&A



OEM Placed Based Messaging

- The Office of Emergency Management (OEM), with the support of the Office of Sustainability (OOS), held a workshop on January 26th with residents to discuss the place-based message system.
- OEM is making updates to the messaging system based on resident feedback and still aims to **launch the system in late Spring 2024** and **install flood monitoring technology in late Summer 2024**.
- Right now OEM is encouraging people to **sign up for ReadyPhiladelphia** by creating an online account. When you **sign up for the Eastwick subscription**, which will ensure you receive all Eastwick specific messaging.
- If you are already signed up for ReadyPhiladelphia you are encouraged to sign back into your online account and select the Eastwick group/subscription.



Drexel's The Environmental Collaboratory (TEC)

Informational Meetings with OEM-OOS

Synthesis of Community Input with Actionable Steps

Overlay of Identified Areas with Ongoing Efforts

Request for Response and Recommendations

Reporting Back & Looking Ahead as an Independent Collaborator on Community-level Emergency Preparedness

Reviewed Surveys, Public Comments, And Focus Groups

- Drexel and Eastwick United Flooding **Surveys** (2021 & 2023)
- City's All-Hazard Mitigation Plan: **Public Comments**
- Feedback and Takeaways from Eastwick Severe Weather Community **Tabletop** (8/3/23)
- OEM's Eastwick Place-based Messaging Pilot (Alert & Warning) Collected And Analyzed Responses (2023) – **Survey & Conversations**
- Responses for the CBDG-DR Action Plan
 - OOS-Led Virtual **Focus Group** in Eastwick
 - **Public comments** (7/14-8/15 2023)
 - Summary Of Unmet Needs Compiled By Eastwick United

PREP AND
RESPONSE

- PRACTICE DRILLING
- WARNING SYSTEM
- EVACUATION
- SHELTER
- SUPPORT VULNERABLE MEMBERS

POST-
EVENT

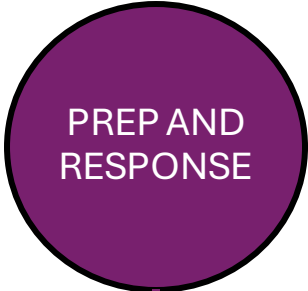
- RECOVERY
- DATA ACCESIBILITY
- COLLABORATE

LONG-TERM
MITIGATION

- RESEARCH
- MITIGATE

COMMUNITY
CAPACITY
BUILDING

- FOOD
- ECONOMY
- EDUCATION
- PROPERTY
- LAND USE



PRACTICE
DRILLING

WARNING
SYSTEM

EVACUATION

SHELTER

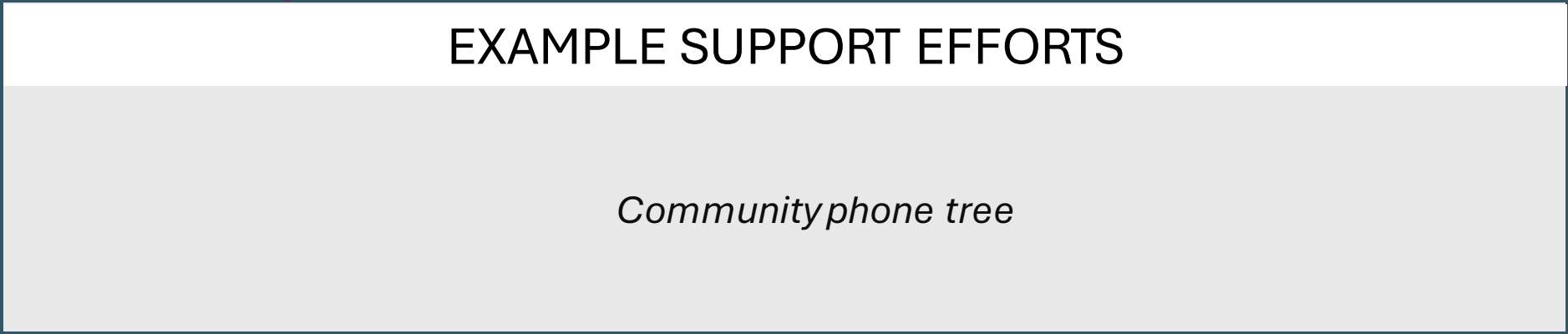
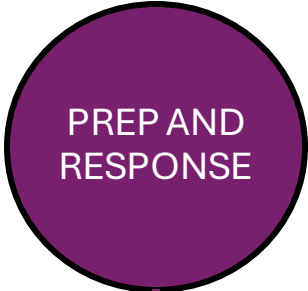
SUPPORT
VULNERABLE
MEMBERS

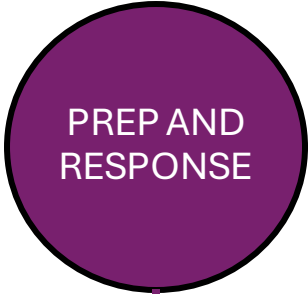
RECOVERY

DATA
ACCESSIBILITY

EXAMPLE SUPPORT EFFORTS

Community-level drill organizing (especially for “one tower with elderly non-english-speaking residents”)





PRACTICE
DRILLING

WARNING
SYSTEM

EVACUATION

SHELTER

SUPPORT
VULNERABLE
MEMBERS

RECOVERY

DATA
ACCESSIBILITY

EXAMPLE SUPPORT EFFORTS

Neighborhood specific evacuation planning

Next Steps:

- Provide all synthesis of materials
- Set up a virtual group discussion, and/or collaborate on workshop between The Environmental Collaboratory at Drexel and Eastwick Community Residents [April/May]

Preliminary
Questions:

- *What Is Missing Or Incomplete From This Synthesis?*
- *What Near-term Identified Needs Are The Top Priorities?*
- *In What Way Could Drexel TEC Best Support Eastwick In Flood Emergency Preparations?*

To connect with Drexel TEC, please email mhh62@drexel.edu.

PREPAREDNESS AND RESPONSE

Drilling

- Especially Elderly Non-English-Speaking Residents
- Trauma Informed Facilitation
- Partners (PPD, LSNA, community orgs)

Warning System

- Flood Monitoring Tools
- A System Of Alarms/Sirens Strategically Placed
- Messaging: Formal & Informal (Phone Tree)

Shelter

- Multiple, Near Eastwick, Well-resourced (Cots And Accessible Bedding), Publicly Accessible, Safe
- Investigate Additional Locations (Betram, Com-Tech)

SHARED KNOWLEDGE FROM THE EASTWICK RESIDENTS ON COMMUNITY NEEDS FOR FLOODING DISASTER RESILIENCE

Evacuation

- Directional Signage
- Multi-Format Communication (Digital, Flyers, etc.)
- Police Security for Property

Support Vulnerable Members

- Roof Signal/Flag for Dire Need Households
- Priority In Any Community Phone Triage
- Priority And Known Needs To First Responders

Recovery

- Electronic And Physical Updated List Of Resources
- Nearby Multi-agency Resource Center (MARC)
- Maintain Recovery Fund and On-Going Projects

Collaborate

- Strong Outreach and Multi-Level Effort Coordination
- Investment in Community Organizing
- Equitable Politician Engagement When Appropriate

Data Accessibility

- "... Access to the survey data and not just the resulting analyses ... to understand their communities."
- Transparency & Equity in Funding Distribution

Property

- Retrofit In-house Drains, Sump Pumps, Community Stormwater Infrastructure
- Short-term Tools: Like Flexible, Portable Flood Barriers

Research

- Coordinated Flood-Risk Studies, Feasibility Studies for Building Uses, Mitigation Options, Etc.

Mitigation

- Short-term, Maintenance of Streets, Drains, & Sewer
- Long-term, Comprehensive Mitigation Strategies

POST-EVENT

LONG-TERM MITIGATION

COMMUNITY CAPACITY BUILDING

Economy

- Culture, Tourism, History, Flood Haven
- Flood Resilient/Mitigatory

Education

- Job Training & Development/Education/Disaster Relief And Food Distribution
- Youth STEM Programs & Adult Certifications

Food

- Need-Based Food Distribution Systems
- Healthy and Diverse (farmers markets, festivals, etc.)
- Meal Preparation Education

Land Use

- Warn New Renters/Buyers Of High Flood Risk
- Transparent, Responsible Land Use Development
- Enforce Building Codes and Regulations



Q&A



Community Updates

Traffic Calming Request Form

- Traffic calming measures like asphalt speed cushions can slow drivers down. They can also make crashes less likely or less severe when they do happen.
- You can request traffic calming for eligible streets. The Department of Streets will review your request, score it, and contact you for further information if it's selected for traffic calming.

Submit a request for traffic calming

If your street is eligible for review, you can use the following form to submit a request for traffic calming. You should only submit a request once. Repeated requests will be declined.


Philly 311 [Log In](#) [Sign Up](#)

[View issues](#)

Traffic Calming Request
Tell us more about the issue:

Address (required)

Drag the map pin to mark the issue's location or type its address here



Map Satellite

Philadelphia

What issue is being reported? (required)

Choose among the following... ▾

John Heinz National Wildlife Refuge

FREE!

JOHN HEINZ
FROG WALK
NATIONAL WILDLIFE REFUGE

Join us for our annual frog call survey!

FRIDAY APRIL 5TH, 2024

6:45 - 7:30 PM 7:30 - 9:00 PM

KID'S ACTIVITIES
FROG GAMES & CRAFTS

FROG SURVEY
WALK & LISTEN TO FROG CALLS WITH THE BIO CREW!

JOHN HEINZ NATIONAL WILDLIFE REFUGE AT TINCUM, 2401 LINDBERGH BLVD., PHILADELPHIA, PA 19153
SEPTA ROUTES 37, 108, & 115 STOP AT ATRA & LINDBERGH BLVD.
EASTROCK TRAIN STATION IS 0.5 MILES AWAY. @JOHNHEINZNR Call: 267-969-3207

4/5 Frog Walk
Crafts and gear available!

VOLUNTEERS NEEDED!

EARTH DAY CREEK CLEAN-UP

Saturday
April 13
10 AM - 1 PM

Lend a hand to community, wildlife and wetland habitat!

Meet at the Pavilion near the Visitor Center for sign-in and supplies!

LUNCH PROVIDED!

For more information or group scheduling, contact hanmah_thompson@fws.gov or call 267-969-3206

WMA WASTE MANAGEMENT FENC

John Heinz National Wildlife Refuge at Tincum
2401 Lindbergh Blvd., Philadelphia, PA 19153
SEPTA routes 37, 108, & 115 stop at ATRA & LINDBERGH BLVD.
Lindbergh Blvd. Eastrock Train Station is 0.5 miles away. @johnheinznr

4/13 Darby Creek Clean Up
Volunteers needed! Lunch provided!

JOHN HEINZ NATIONAL WILDLIFE REFUGE

FREE!

Astronomy Night!

April 19
8-10 PM

RAIN DATE: SATURDAY APRIL 20TH 8:00 PM - 10:00 PM

QUESTIONS? CONTACT YESSIEA_MENDEZ@FWS.GOV

Join us for a night of moon watching and stargazing led by local astronomers at the refuge! Snacks and fun activities for all ages will be provided under the pavilion!

RAIN DATE: SATURDAY APRIL 20TH 8:00 PM - 10:00 PM

QUESTIONS? CONTACT YESSIEA_MENDEZ@FWS.GOV

JOHNHEINZNR

4/19 Astronomy Night
Stargazing and snacks!

2024

Junior Ranger Summer Camp

Explore the outdoors with us at John Heinz National Wildlife Refuge!

July 30 - August 1
9 am - 3 pm
Ages 8 - 11 only

FREE!

Registration OPEN

Space is limited, registration closes when all spots are filled

Contact: Ranger Kelly kelly_kemmerle@fws.gov
267-969-3207

John Heinz National Wildlife Refuge at Tincum, America's First Urban Refuge
8601 Lindbergh Blvd., Philadelphia PA 19153
SEPTA routes 37, 108, & 115 stop at 84th & Lindbergh
Eastrock Train Station is .5 miles away

For more info: (215) 365-3118 @johnheinznr www.fws.gov/heinznr

Fishing Archery Nature Photography Crafts Wildlife Observation Orienteering

7/30-8/1 Jr. Ranger Summer Camp
Registration required!

All events free!

Upcoming Trail Walk

- Saturday, April 20th at 10 am!
- Walk the proposed path of the Cobbs Creek Trail Extension from 80th Street to Island Avenue
- Speak with the City and non-profit partners
- Questions? Email trails@phila.gov



SATURDAY, APRIL 20th

10 AM

COMMUNITY WALK

PROPOSED COBBS CREEK TRAIL EXTENSION

With Trail Partners

SATURDAY, APRIL 20TH AT 10AM

- ✓ Meet at the Eastwick Rec Center entrance near the playground (also called Eastwick Regional Playground on Google Maps)
- ✓ Walk the proposed path of the Cobbs Creek Trail Extension from 80th Street to Island Avenue
- ✓ Speak with the City and non-profit partners

Questions?
Email trails@phila.gov



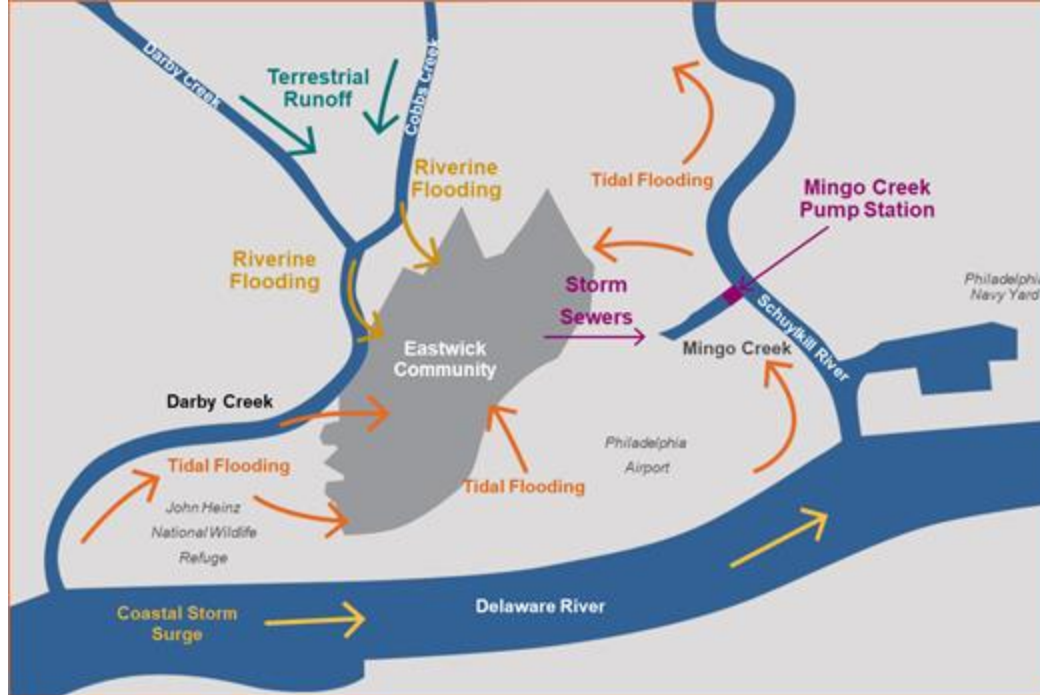


Open Forum



Flood Resilience Strategy

Eastwick is vulnerable to multiple sources of flooding



- Riverine flooding from Darby/Cobbs
- Tidal flooding from the Delaware
- Coastal Storm Surge from the Delaware
- Sea Level Rise

Concept diagram of flood sources in Eastwick.
Source: Arcadis

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Community Preparedness



HESCO Flood Barriers

THE CITY OF PHILADELPHIA
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Flood Ready Homes Guide

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Voluntary Buyout?
Reconstruction?
What else?

Cobbs Creek Levee




Relocation/
Landswap





USACE Levee Feasibility Update

- Next steps for finalizing the feasibility study:
 - Incorporating public comments
 - Additional data collection (bathymetric survey, bridge elevations)
 - Optimizing levee design
 - Evaluating complementary measures to mitigate induced flooding
 - Complementary measures may exceed program cost allowance
 - Exploring funding sources and partnership opportunities to fund complementary measures
 - Estimated timeline:
 - Complete data collection, data analysis, and refine modeling: December 2024
 - Complementary measure and levee optimization: Summer 2025
 - Finalize Feasibility Report: Fall 2025
- 



Q&A

Approach for Flood Resilience Strategy



INTEGRATING EXISTING STUDIES AND CONCEPTS INTO COMPREHENSIVE PLANNING PROCESS



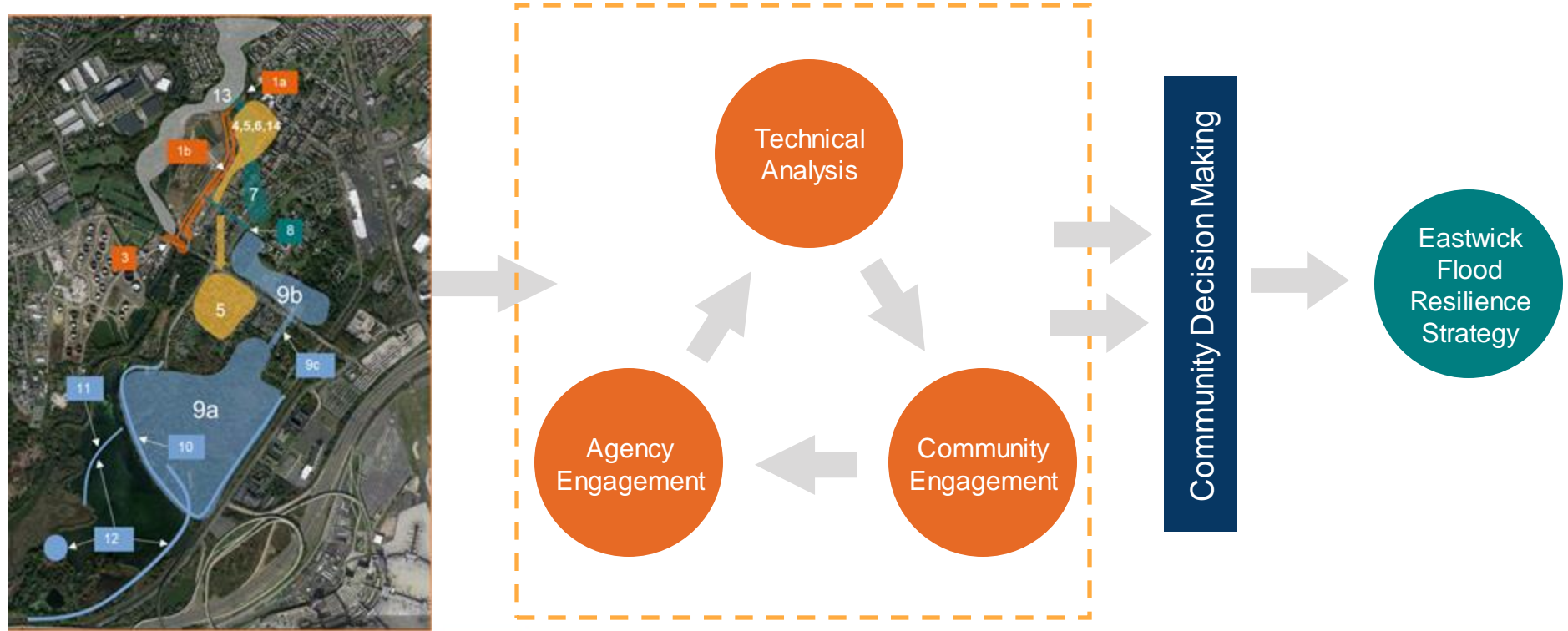
STEVENS
INSTITUTE OF TECHNOLOGY
THE INNOVATION UNIVERSITYSM



FEMA



Approach for Flood Resilience Strategy



Flood Resilience Strategy – Consultant Team



*Resilience Strategy
& Technical
Modeling Lead*



*Community
Engagement &
Outreach*



*Urban Planning &
Design, Landscape
Architecture*



*Housing &
Disaster Recovery
Funding*



*Community-
Supported Buyout
Planning*

Kicking off in April! What to Expect:

- Formation of a Community Committee to guide engagement, share resident perspectives, and hold the project team accountable
 - Working with EU, EFNC, and Heinz refuge to develop this committee
- Variety of community engagement methods
- Continued coordination and collaboration with agency partners

Anticipated outcomes:



Community decision making around flood resilience measures



Concept designs and benefit cost analysis for preferred measures



Submission of grant applications to fund implementation



Q&A



Poll 2



City of
Philadelphia