

# MAKE CAMBRIDGE RESILIENT STAKEHOLDER MEETING NOTES

March 25, 2025 1:30- 3:00 PM The Make Cambridge Initiative serves as an umbrella for multiple common efforts & grants:

- Flood Mitigation Plan & Concept Design
- Flood Mitigation Project (Phase 1 Design)
- Community Development
- NFWF Habitat Enhancements & Green Stormwater Management

Virtual meeting conducted. Stakeholders and invited guests in attendance:

Name	Organization/Department			
Larry White	Strategic Programs Development, LLC			
Bucky Jackson	City of Cambridge DPW- City Engineer			
LaJan Cephas	City of Cambridge - Mayor			
Glenn Steckman	City of Cambridge - Manager			
Andrew Koslow	City of Cambridge DPW- Environmental Program Manager			
Brian Herrmann	City of Cambridge – Planning Director			
Holly Baldwin	City of Cambridge - Planner I & Historic Preservation			
Jimmy Windsor	DC Planning and Zoning Director			
Susan Webb	Dorchester Emergency Management			
Dr. Ming Li	UMCES - Horn Point			
Dr. Kenny Rose	UMCES – Horn Point			
Matt Pluta	Shore Rivers			
Matt Smith	Maryland Department of the Environment			
Rob D'Amato	Maryland Department of the Environment			
Bryan Bay	Maryland Department of the Environment			
Debbie Herr Cornwell	Maryland Department of Planning			
Stacey M. Underwood	USACE Baltimore District			
Carrie Decker	Chesapeake and Coastal Service, DNR			
Megan Spindler	USACE Baltimore District			
Amanda Pollack	Center for Watershed Protection			
Megan Barniea	BayLand Consultants			
Anna Johnson	BayLand Consultants			
Sepehr Baharlou	BayLand Consultants			
Virginia Smith	SP&D			

The meeting focused on various projects under the Make Cambridge Initiative including flood mitigation, habitat enhancement, restoration, and green infrastructure, with an emphasis on stakeholder involvement and collaboration for successful implementation.

#### Agenda

- **NFWF Project Description & Scope of Work** Kenneth Rose, France-Merrick Professor in Sustainable Ecosystem Restoration, Horn Point Laboratory University of Maryland Center for Environmental Science
- **NWFW Integration with Flood Mitigation Design** Anna Johnson, P.E., CC-P, BayLand Consultants & Designers & Megan Barniea, P.E., BayLand Consultants & Designers
- FEMA BRIC Grant: Flood Protection Against Major Storms Larry White, P.E., Make Cambridge Resilient Project Manager
- Green Infrastructure Plan Ginny Smith, AICP, SP&D
- Green Infrastructure Plan Appendix: Preferred Stormwater Practices Andrew Koslow, City of Cambridge Environmental Programs Director
- Green Infrastructure Priority Projects Amanda Pollack, P.E., Director of Training
- City Of Cambridge Comprehensive Plan Update Brian Herrman, City of Cambridge Planning Director

## National Fish and Wildlife Foundation Description & Scope

- The National Fish and Wildlife Foundation (NFWF) –
  National Coastal Resilience Fund is providing funding for the
  habitat restoration project. NFWF is the nation's largest
  private conservation foundation.
- The project aims to guide the design of the living shoreline and its stormwater discharge to maximize fish and wildlife habitat and improve water quality discharing to the living shoreline.
- The goal is to balance cost efficiency and deliver shoreline benefits while engaging stakeholders in the design process.
- Different key species and their habitats will be determined based on engagement with a variety of people.
- The project will focus on both coarse-grained and fine-grained habitat design to support different species.
- Habitat suitability assessments will be conducted using models and data to determine the quality and quantity of habitat for different species.
- The project will involve community engagement and use decision analysis to inform the design process.
- Scalability and transferability are important components of the project. Guidance, step-by-step methodology, and education materials will be produced as a project deliverable included in the NFWF grant for use by communities of various sizes, practitioners, and secondary education programs.
- Publicly owned properties within the project area will
  provide opportunities for additional habitat restoration
  features, including the recently city acquired property, the
  former radio station, which is adjacent to Gerry Boyle Park.
- Green stormwater management at Gerry Boyle Park will replace previously identified storage tanks included in the initial concept design for this area.
- The flood mitigation project design is in-line with the original (Great Marsh Park-Concept Plan) Gerry Boyle Park, which included a wet meadow and vegetation.
- The wet meadow will include some permanent pools to improve water quality while some of the plantings will provide additional habitat as well as treating runoff.

#### **FEMA BRIC Grant: Flood Protection Against Major Storms**

The city recently submitted a FEMA BRIC application focused design and construction of:

- 1. Green infrastructure projects to increase the capacity of the City's SWM system.
- 2. Flood protection against major storms for businesses and residents.
- 3. Protection of critical infrastructure.

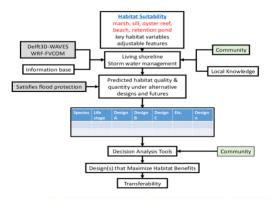
The grant application contains multiple projects reflective of the three focus areas.

- Six Green Infrastructure Projects Included in recently completed GI Plan.
- Stormwater Storage Infrastructure
- Enhancements to Existing Gray SWM System

## **NFWF Habitat Modeling and Design**

Target Habitats implemented into Living shoreline









Great Marsh Park Working Waterfront Concept Plan

- Floodproofing Flood-prone Businesses this includes five commercial structures.
- Floodproofing Flood-prone Multi-Family Residential Structures this includes two large condo buildings.
- Peachbottom Creek Stream Restoration Project this project was previously identified.
- Cedar Street Stormwater Management Project this project was previously identified.
- Protection of Critical Infrastructure

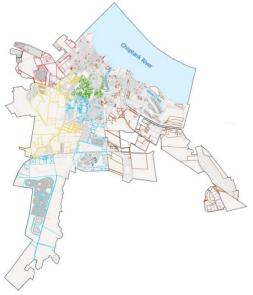
The project includes two phases - phase 1 design with an estimate cost of \$3,068,000 and phase 2 construction with an estimated cost of \$18,306,000. This grant application is currently under review by the Maryland Department of Emergency Management (MDEM). Following the MDEM review and approval process, MDEM formally submits the grant application to FEMA.

#### **Green Infrastructure Plan**

As part of the FEMA Community Development Grant, green infrastructure planning has been completed. The draft *City of Cambridge Green Infrastructure Plan* along with the *Appendix: Preferred Stormwater Practices* were distributed following the last Stakeholder Group meeting held in February for review and comment.

- The purpose of the Cambridge Green Infrastructure Assessment (CGIA) is to identify vacant parcels, both privately and publicly owned, that could add significant value to the city's flood risk reduction efforts, open space, habitat enhancements, and water quality improvements, in the form of a green infrastructure.
- The results of the assessment: a potential citywide green infrastructure network and strategies that can be applied at the neighborhood scale.
- A four step assessment was conducted.
  - Step 1 Vacant Parcel Inventory
  - Step 2 Prioritization Considerations Applied to Vacant Parcel Inventory
  - Step 3 Examination for GI Suitability & Opportunity Per Ward
  - Step 4 Strategic Actions & Recommendations
- The City of Cambridge includes over 869 parcels which have been identified as vacant. This assessment evaluated the potential for vacant parcels to contribute to the City's green infrastructure.
- Considerations used in the CGIA:
  - 1. More than .5 acres and/or contiguous vacant parcels or adjacent to other designated open space/recreation parcel.
  - 2. Parcel located on roadway identified as a nuisance flood location. Nuisance flood roadways were identified using information from various planning documents and the Make Cambridge Resilient Initiative 2024 Public Survey.
  - 3. Parcel located within a FEMA floodplain, see Map 4. Specifically, the FEMA designated Special Flood Hazard Area (SFHA) or 1% annual chance event. The area formerly referred to as the 100-year floodplain.
  - 4. Parcel intersects with existing wetland, see Map 5.
  - 5. Parcel includes hydric soils, see Map 6. Indicating poorly drained soil, potential suitability for wetland.
  - 6. Parcel located within or adjacent to Maryland Habitat Connectivity Network- Hubs, Corridors, & Gaps, see Map 7.
    - One additional column was added to the VPI to indicate whether or not the parcel meetings considerations #2 and/or #3, with Yes/No.
- Parcels meeting the prioritization considerations were further examined to determine suitability and opportunities for potential Green Infrastructure projects. This examination was completed per election district ward.





- As a final step, projects were identified for each of the City's elections wards. In addition, projects that included considerations used in the CGIA from the 2018 Cambridge Creek Watershed Assessment and Action Plan were extrapolated and included.
- Six projects from the GI Plan were included in the most recent FEMA BRIC application discussed earlier in the meeting.
- GI ordinance options and institutionalizing green infrastructure conclude the GI Plan.

### **Green Infrastructure Plan Appendix: Preferred Stormwater**

The Green Infrastructure Plan Appendix was completed separately from the GI Plan however the two documents complement each other and serve to guide green infrastructure and stormwater management best practices within the City of Cambridge.

- Recommended Best Management Practices (BMPs) are included, each practice is approved by Maryland Department of the Environment (MDE).
- Using multiple BMPs throughout the city instead of relying on a small number of large-scale practices.
- Nature-based solutions extend capacity of grey infrastructure.
- Sample projects were discussed and included:
  - Silva Cells under Poplar and Race Street sidewalks sidewalk support system that you fill with engineered soil to hold/store water and provide space for tree roots.
  - Cedar Street Green Street Project includes new design for lighting, pedestrian area, bike lanes, and stormwater management.



## **Green Infrastructure Priority Projects**

Amanda Pollack with the Center for Watershed Protection on behalf of Envision the Choptank provided technical assistance to develop basic design and cost estimates for GI priority projects for inclusion in the recently submitted FEMA BRIC grant application. Projects include both bioretention areas (filter material and underdrains) and bioswales (more linear, help retain water 24-72 hrs.)

GI Plan Projects	Design		Construction		Total Project	
Meadow Avenue Park	\$	26,300.00	\$	45,475.00	\$	71,775.00
Race and Cedar Streets	\$	36,800.00	\$	452,335.00	\$	489,135.00
Elm Street	\$	44,300.00	\$	347,149.00	\$	391,449.00
Pine Street CC	\$	28,300.00	\$	34,765.00	\$	63,065.00
Cedar and Academy Streets	\$	26,300.00	\$	92,775.00	\$	119,075.00
Race Street Parking Lot	\$	27,800.00	\$	169,655.00	\$	197,455.00
Total all GI Projects	\$	189,800.00	\$	1,142,154.00	\$	1,331,954.00





#### City of Cambridge Comprehensive Plan Update

Brian Herrmann, City of Cambridge Planning Director informed the group that the city has just initiated their Comprehensive Plan Update. The plan was last updated in 2011. While comprehensive plans typically have a twenty year planning horizon, the Maryland Department of Planning (MDP) recommends comprehensive plan updates every ten years. The comprehensive plan outlines the community's vision and the steps needed to achieve it. The new plan will prioritize walkable mixed-use neighborhoods and focuses on form and character of the place. The selected consultant has been instructed to focus on a user-friendly and place-based approach to this city-wide planning effort. This includes specific neighborhoods, lots of visuals of various scales, mapping, and renderings.

Plan must involve elected officials, city staff, residents, businesses, and civic organizations for successful partnership. The city is encouraging robust public feedback throughout the comprehensive plan development process, including interactive planning charrettes, visual preference surveys, and social media. This is in-line with the Make Cambridge Resilient Initiative, as design charrettes were conducted and a visual preference survey was used to inform the flood mitigation project concept design. The Make Cambridge Resilient project website will include information on the comprehensive plan, particularly those elements that align with flood mitigation, green infrastructure, and habitat preservation and restoration.

Mr. Herrman pointed out that the following plan Elements shall be addressed as required by the State of Maryland:

- 1. Land Use and Development Regulations
- 2. Municipal Growth
- 3. Sensitive Areas
- 4. Water Resources
- 5. Mobility & Transportation
- 6. Housing
- 7. Natural resources
- 8. Community Facilities
- 9. Fisheries

Note: those plan elements highlighted in green text align with flood mitigation, green infrastructure, and habitat preservation and restoration.

In addition, the city is including the following elements:

- 1. Community Design & Historic Preservation
- 2. Cultural Resources
- 3. Health
- 4. Economic Development
- 5. Tactical Improvements (pop-up and demonstration projects street and intersection improvements, bike lanes, pop-up parks, dog parks, food truck courts, etc.)
- 6. Coastal Resilience (Matt Pluta Planning Commissioner)

Integration of the green infrastructure plan including specific recommendations and projects into the Comprehensive Plan Update was a priority strategic action in the *City of Cambridge Green Infrastructure Plan*.

- Green Infrastructure (GI) Assessment including recommendations for Ordinance Updates:
  - o Incorporating bioretention in general landscaping projects.
  - Using native or deep-rooted plants with ample soils in place of turfgrass. Consider specific buffer language.
  - o Reducing the total impervious area associated with parking requirement.
  - o Allowing permeable surfaces in parking areas, driveways, fire protection areas, and alleyways.
  - o Incorporating tree planting, native plants and soil amendments to foster root development and increase infiltration in turfgrass.
- Update City's Floodplain Ordinance Promote "Green Infrastructure" (addressing water quantity and water quality) at:
  - o Open Green Spaces
  - Parks
  - Vegetation
  - o Landscaping

#### **Ouestions & Comments**

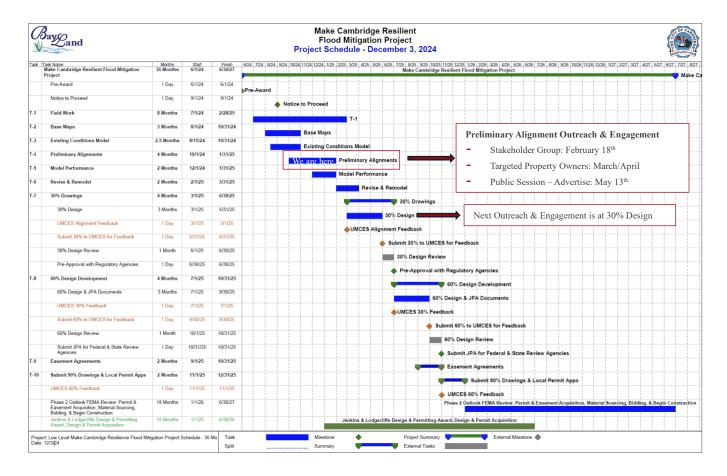
- Aside from the former radio station, are there future acquisitions planned for flood-prone property.
  - Not at this time, the City has no other flood acquisitions planned. However, the recently submitted FEMA BRIC grant application included floodproofing projects for both commercial and multi-family residential.
- What planning has been done or what mechanisms are in-place to address maintaining green infrastructure?
  - The new GI Plan includes a section on institutionalizing GI specific to monitoring and maintenance. Andrew Koslow, City Environmental Program Director provided information on current monitoring and maintenance. The following information provided by Mr. Koslow has been added to the GI Plan.

The City of Cambridge utilizes an in-house tablet-based tool to streamline the monitoring and maintenance of green infrastructure. Staff can inspect sites, capture photos, and upload data directly to the City's GIS system, ensuring quick access to inspection records and maintenance needs. This integration helps staff stay informed and responsive.

## Flood Mitigation Phase 1 Recap & Updates

## **Phase 1 Design Project Timeline**

- As indicated on the timeline, we are in the initial stages of the Phase 1 Project Design.
- While the previous multi-year planning effort resulted in the Flood Mitigation Plan and concept design. The Flood Mitigation Project Phase 1 Design builds from previous efforts, however a new project timeline and key project milestones specific to design process is now underway. The official start of the Flood Mitigation Project Phase 1 Design was September 1, 2024, following the official execution of the FEMA grant award to the City of Cambridge. As such, the first project deliverable for review and comment under Phase 1 Design is the Preliminary Alignment.



## Preliminary Alignment Public Engagement & Outreach

- Individual meetings with property owners have been conducted throughout March. The majority of the
  property owner meetings have been conducted with just a few remaining. The Core Team is working on
  scheduled the remaining meetings.
- Public Meeting- Preliminary Alignment scheduled for the evening of May 13<sup>th</sup> at the Cambridge Library, meeting room.

#### **Next Steps**

- Distribution of Stakeholder Meeting Notes & Meeting Slide Deck
- Hold remaining few Preliminary Alignment Targeted Property Owner Meetings
- Preliminary Alignment Public Meeting May 13, 2025
- 30% Design Summer 2025