



# rECovery

REBUILDING ELLICOTT CITY:  
A RESILIENT COMMUNITY



## Rebuilding #ECStrong: Working Together on a Path to rECovery

### Community Forum on Rebuilding and the Environment



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**STEVE BRIGHAM**  
**PUBLIC ENGAGEMENT ASSOCIATES**



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Video

**ALLAN KITTLEMAN**

**HOWARD COUNTY EXECUTIVE**

## Purpose

- A focus on the long-term flood recovery process with an emphasis on Rebuilding and the Environment
- Review project idea generation process; opportunity to propose additional projects
- Discuss what's applicable from EPA's Vermont and Cedar Rapids flood case studies

## Unique Elements of Tonight's Process

- Facilitated table discussions (staff volunteers)
- Fast cycle feedback – themes & examples
- Electronic keypad polling

## Agenda

- Table Introductions & Polling
- Presentation: EPA's Flood Resilience Checklist / Q&A
  - Table Discussion: What 2-3 ideas did we find most compelling from the presentation that seem most applicable to the rebuilding and long-term recovery of Ellicott City?
- Overview: Generation of Project Ideas Process
  - Table Discussion: How well do the project idea “themes” represent the kinds of projects we need to consider during recovery?
  - Brainstorm – your project ideas
- Themes & Examples from the Table Discussions
- Final Polling & Next Steps



# Community Engagement Process

## Toward a Master Plan for a Resilient Town



**Completed**  
**October 2016**

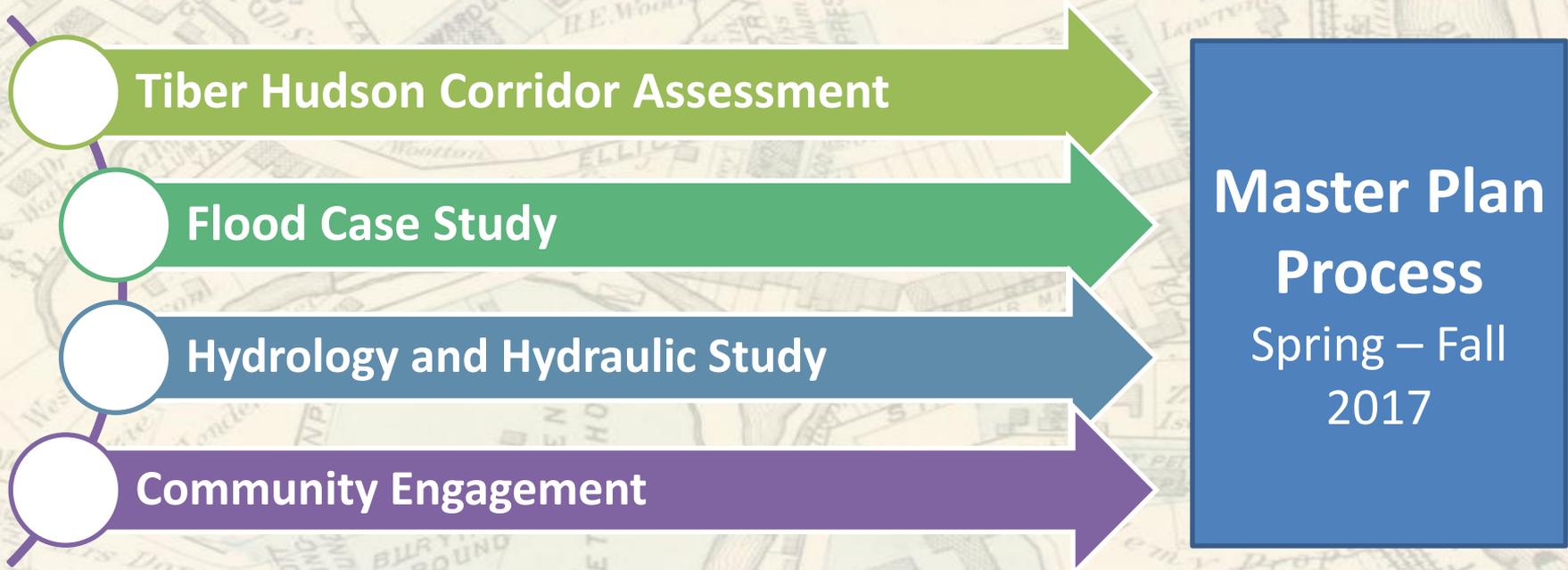
**Present –**  
**Winter 2017**

**Ongoing**

**Spring –**  
**Fall 2017**



# Inputs to Master Plan: Current Efforts





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## TABLE DISCUSSION

## Table Introductions

Share your answers to THREE Questions:

1. What is your name?
2. Where do you live?
3. What do you love most about Ellicott City?

**START BY SILENTLY WRITING YOUR RESPONSE TO #3 ON A SINGLE POST-IT NOTE.**

## Using Your Keypad



- Press the button of your choice
- When you get the green light, your vote has been received
- If you make a mistake, just vote again
- For multiple-choice votes, enter all choices, one after the other, with a green light after each
- For “10”, press 0

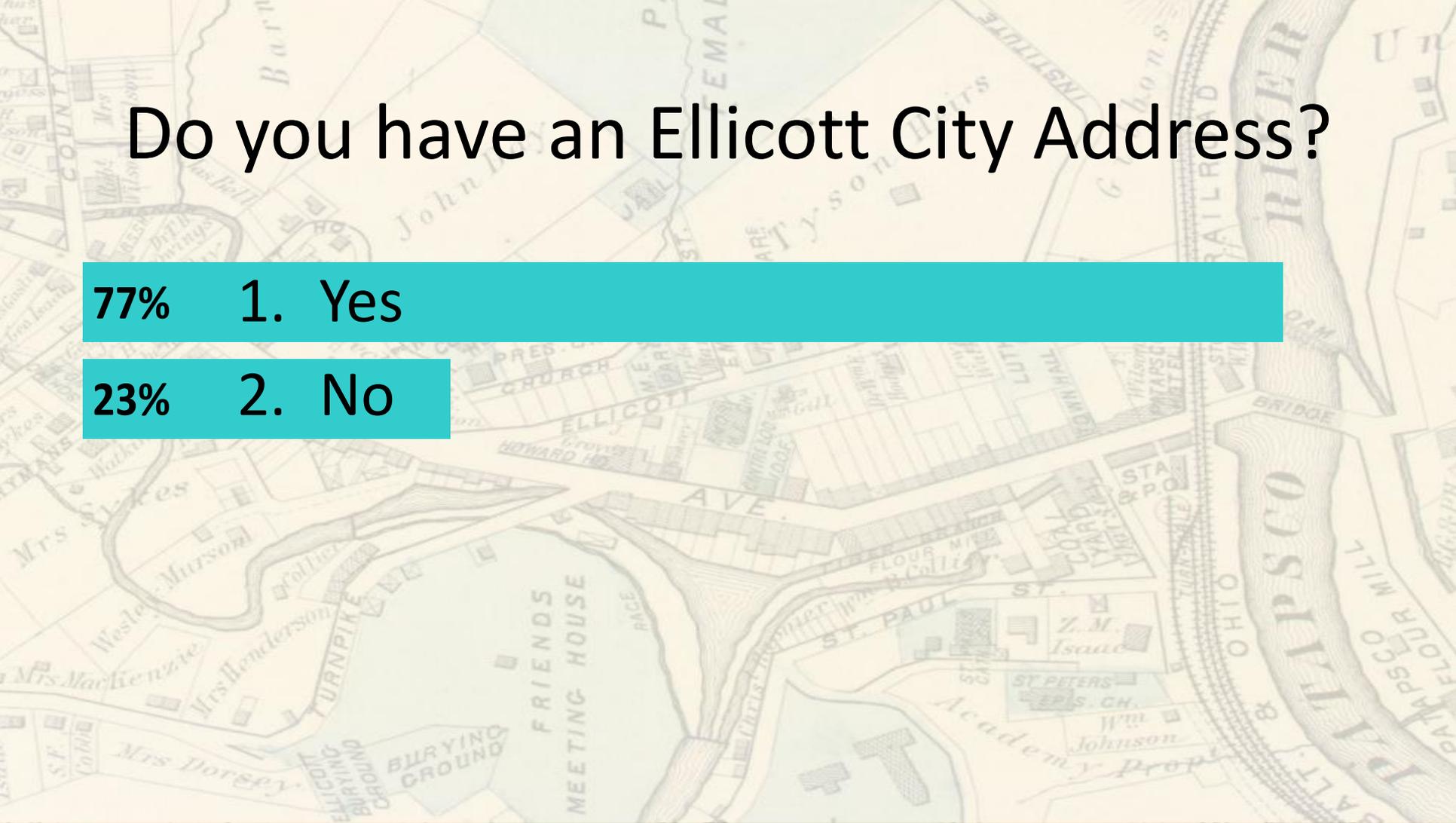
# What is your relationship to Ellicott City? (press all that apply)

- 52% 1. I live there
- 20% 2. I work there
- 11% 3. I own a business there
- 77% 4. I shop there
- 23% 5. I worship there
- 43% 6. I own property there
- 20% 7. Other

# Do you have an Ellicott City Address?

77% 1. Yes

23% 2. No



# How long have you lived, worked or regularly visited (shopped, dined, worshiped) in Ellicott City?

- 2% 1. I don't live, work, or regularly visit Ellicott City
- 17% 2. Less than 5 years
- 10% 3. 5 – 10 years
- 17% 4. 11 – 20 years
- 54% 5. More than 20 years

# How often do you visit Old Ellicott City?

- 49% 1. Daily - I live or work there
- 23% 2. I visit weekly
- 6% 3. I visit 2-3 times per month
- 13% 4. I visit every few months
- 6% 5. I visit a couple of times a year
- 2% 6. I visit rarely

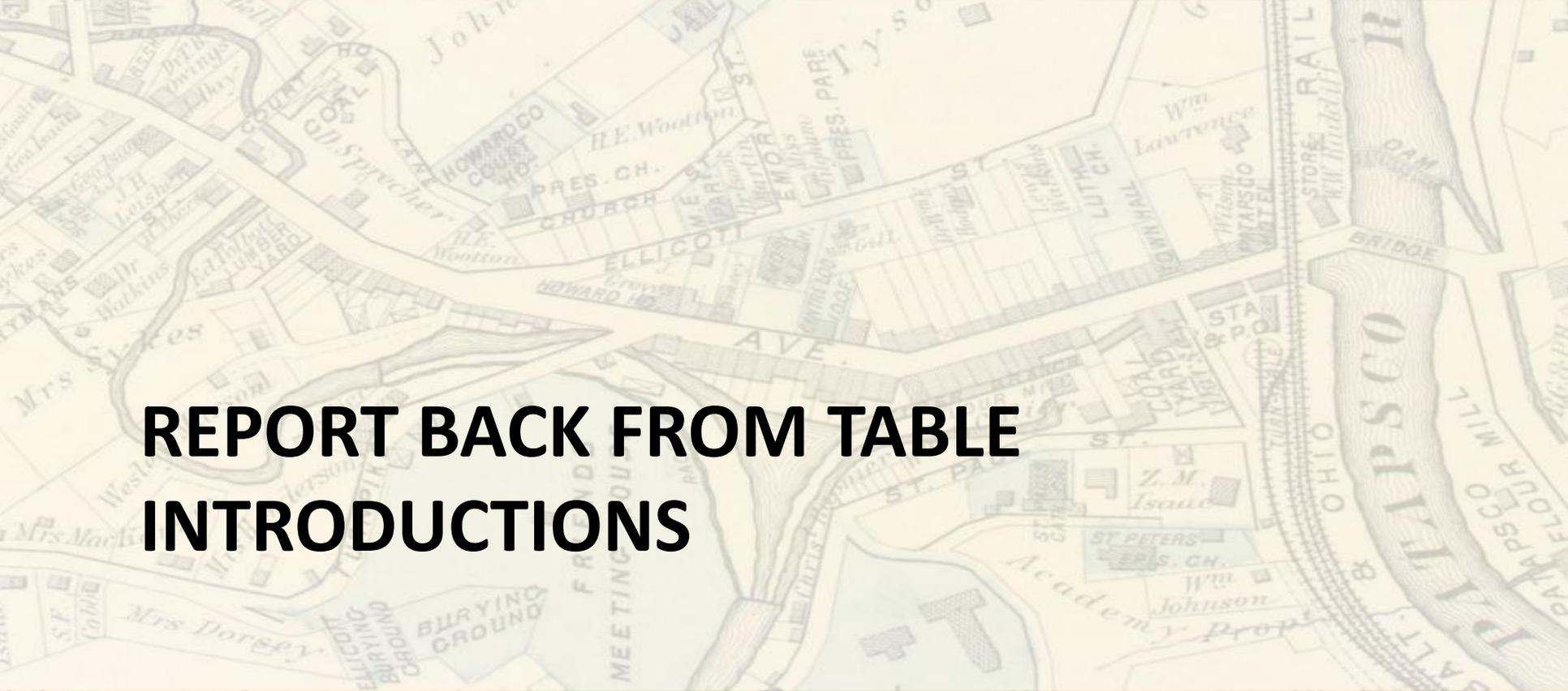
# How important is it to you to rebuild Old Ellicott City?

- 91% 1. Very Important
- 5% 2. Moderately important
- 5% 3. Slightly important
- 0% 4. Not at all important



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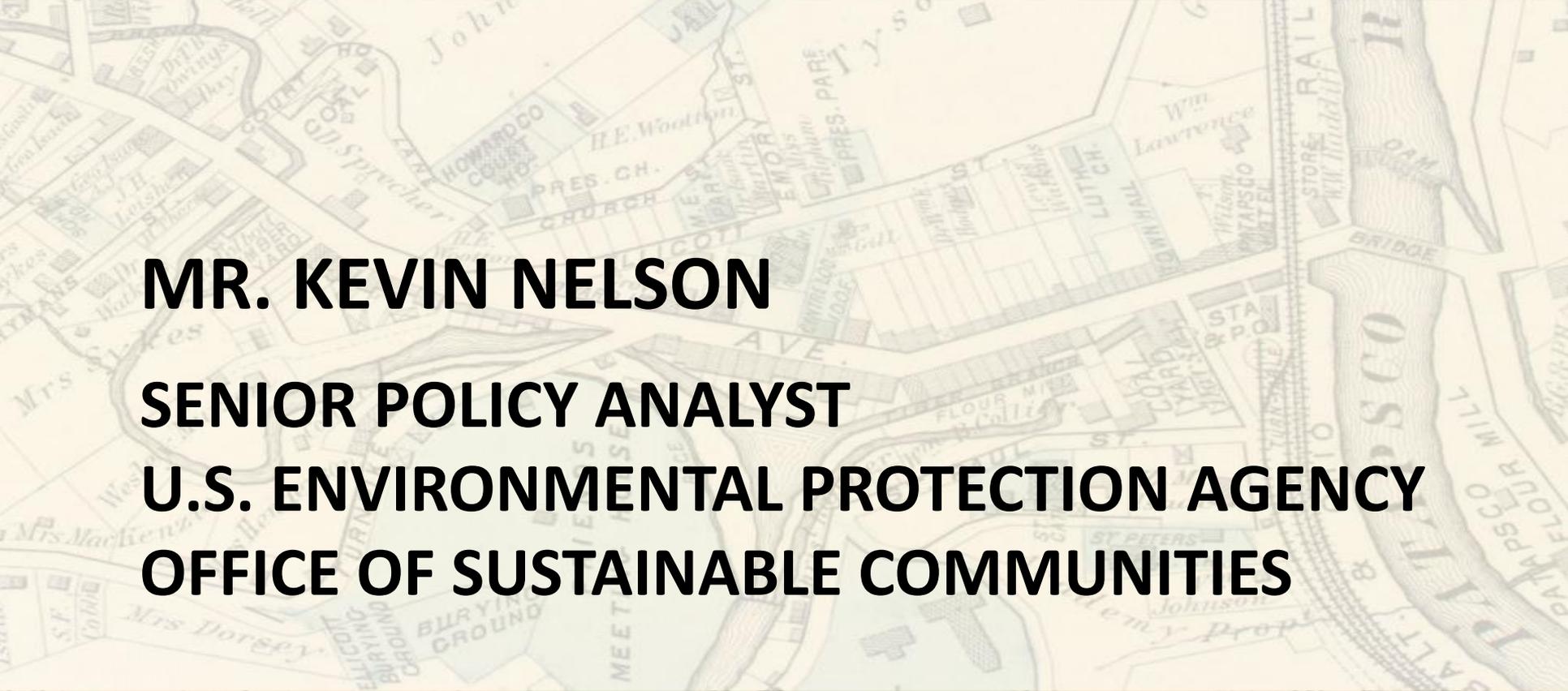


## REPORT BACK FROM TABLE INTRODUCTIONS



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**MR. KEVIN NELSON**

**SENIOR POLICY ANALYST**

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF SUSTAINABLE COMMUNITIES**

# EPA's Tools for Flood Recovery and Resilience

Rebuilding #EC Strong: Working Together on a Path  
to rECovery

November 10, 2016



Smart Growth  
PROGRAM

# Flood Resilience Checklist: A Tool for Communities



- Developed from a Smart Growth Implementation Assistance project in Vermont, to assist in the wake of Tropical Storm Irene
- Based on the framework that we used to assess local plans, policies, and regulations in two Vermont communities
- Adapted so that any community can assess whether their plans and policies will help them become more resilient
- Tool is being refined/expanded through Building Blocks for Sustainable Communities program



## Flood Resilience Checklist

Is your community prepared for a possible flood? Completing this flood resilience checklist can help you begin to answer that question. This checklist was developed as part of the U.S. Environmental Protection Agency's Smart Growth Implementation Assistance project in the state of Vermont. More information about the project can be found by reading the full report, *Planning for Flood Recovery and Long-Term Resilience in Vermont*, found online at [www.epa.gov/smartgrowth/sgrta\\_communities.htm#rec1](http://www.epa.gov/smartgrowth/sgrta_communities.htm#rec1).

### What is the Flood Resilience Checklist?

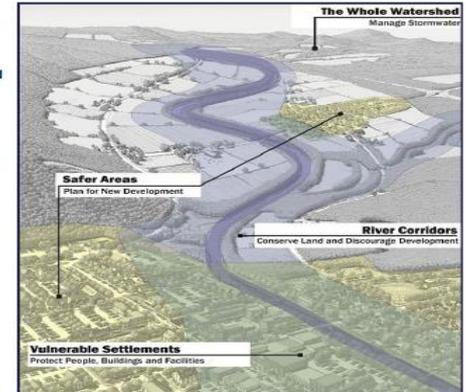
This checklist includes overall strategies to improve flood resilience as well as specific strategies to conserve land and discourage development in river corridors; to protect people, businesses, and facilities in vulnerable settlements; to direct development to safer areas; and to implement and coordinate stormwater management practices throughout the whole watershed.

### Who should use it?

This checklist can help communities identify opportunities to improve their resilience to future floods through policy and regulatory tools, including comprehensive plans, Hazard Mitigation Plans, local land use codes and regulations, and non-regulatory programs implemented at the local level. Local government departments such as community planning, public works, and emergency services; elected and appointed local officials; and other community organizations and nonprofits can use the checklist to assess their community's readiness to prepare for, deal with, and recover from floods.

### Why is it important?

Completing this checklist is the first step in assessing how well a community is positioned to avoid and/or reduce flood damage and to recover from floods. If a community is not yet using some of the strategies listed in the checklist and would like to, the policy options and resources listed in the *Planning for Flood Recovery and Long-Term Resilience in Vermont* report can provide ideas for how to begin implementing these approaches.

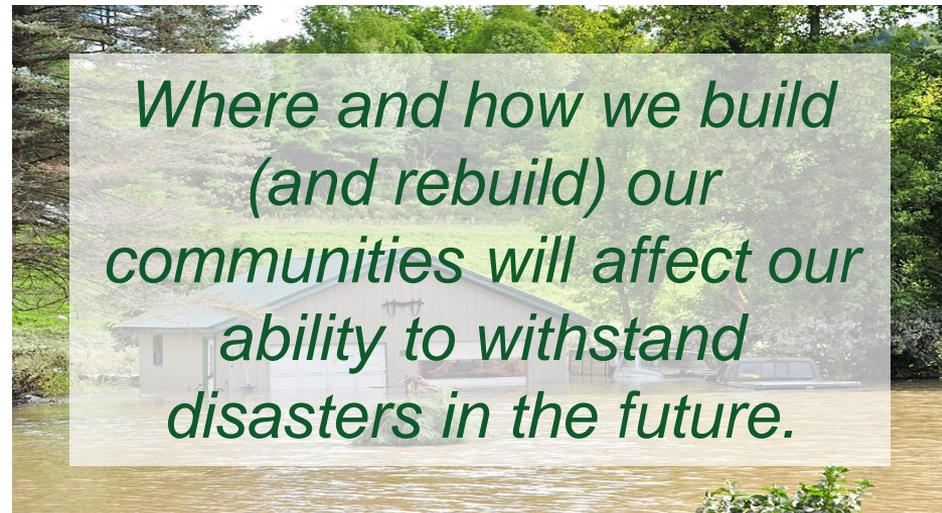


This graphic illustrates the four categories of approaches to enhance resilience to future floods. Credit: Vermont Agency of Commerce and Community Development.

# Flood Resilience in Vermont

In August 2011, flooding & erosion from Tropical Storm Irene devastated communities across Vermont

The state asked for help identifying smart growth strategies to help communities become more resilient to future flooding through their **local plans, policies, & regulations**



# EPA's Assistance to Vermont



- EPA's Office of Sustainable Communities and EPA Region 1 provided assistance through the Smart Growth Implementation Assistance program
- Partners: FEMA (through our MOA), state agencies, Mad River Valley Planning District, Friends of the Mad River, Central Vermont Regional Planning Commission

# EPA's Assistance to Vermont

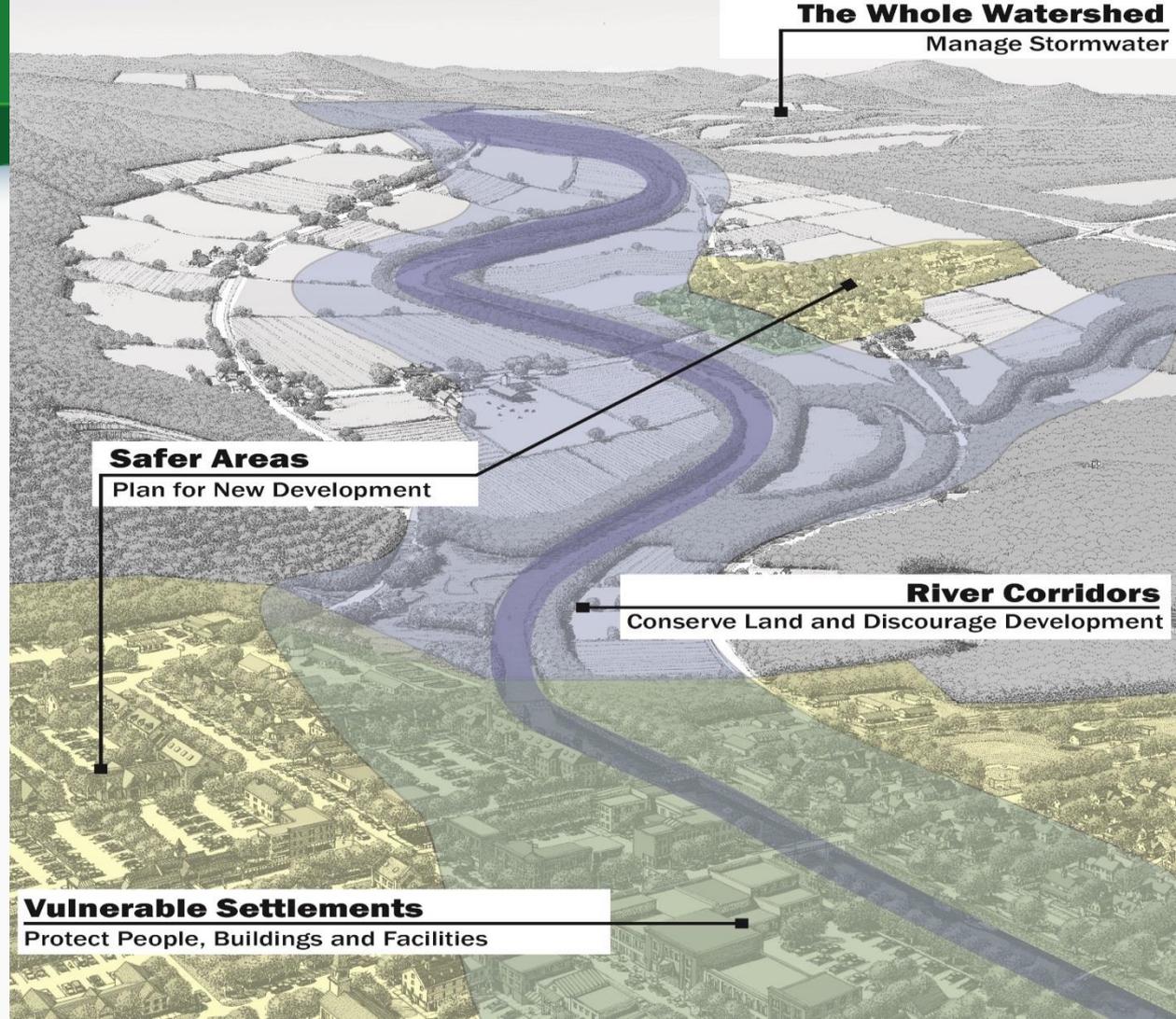


Photos: EPA

- Team of national experts in land use planning and disaster recovery and resilience assessed state and local plans and policies
- In October 2012, toured flood-affected communities in the Mad River Valley and participated in a community workshop and state agency meetings
- Refined policy options in the final report, Flood Resilience Checklist, and state agency report

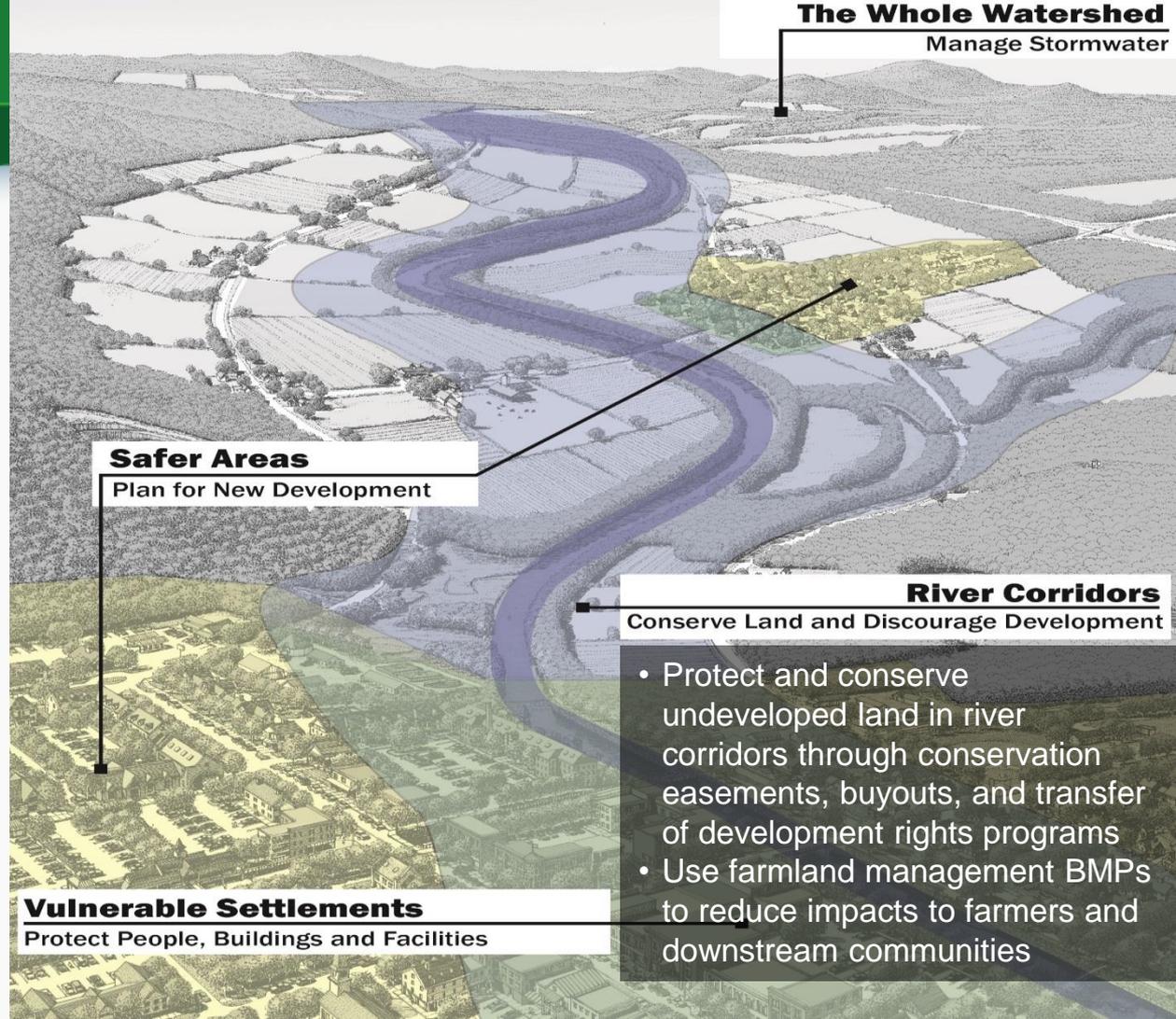
# Vermont SGIA: Local Land Use Policies for Resilience

- Reviewed local plans, policies, and regulations, including:
  - Local comprehensive plans
  - Local Hazard Mitigation Plans
  - Development regulations
  - Building codes
  - Stormwater management ordinances
  - Regional plans
- Developed strategies for increasing flood resilience, using a new framework



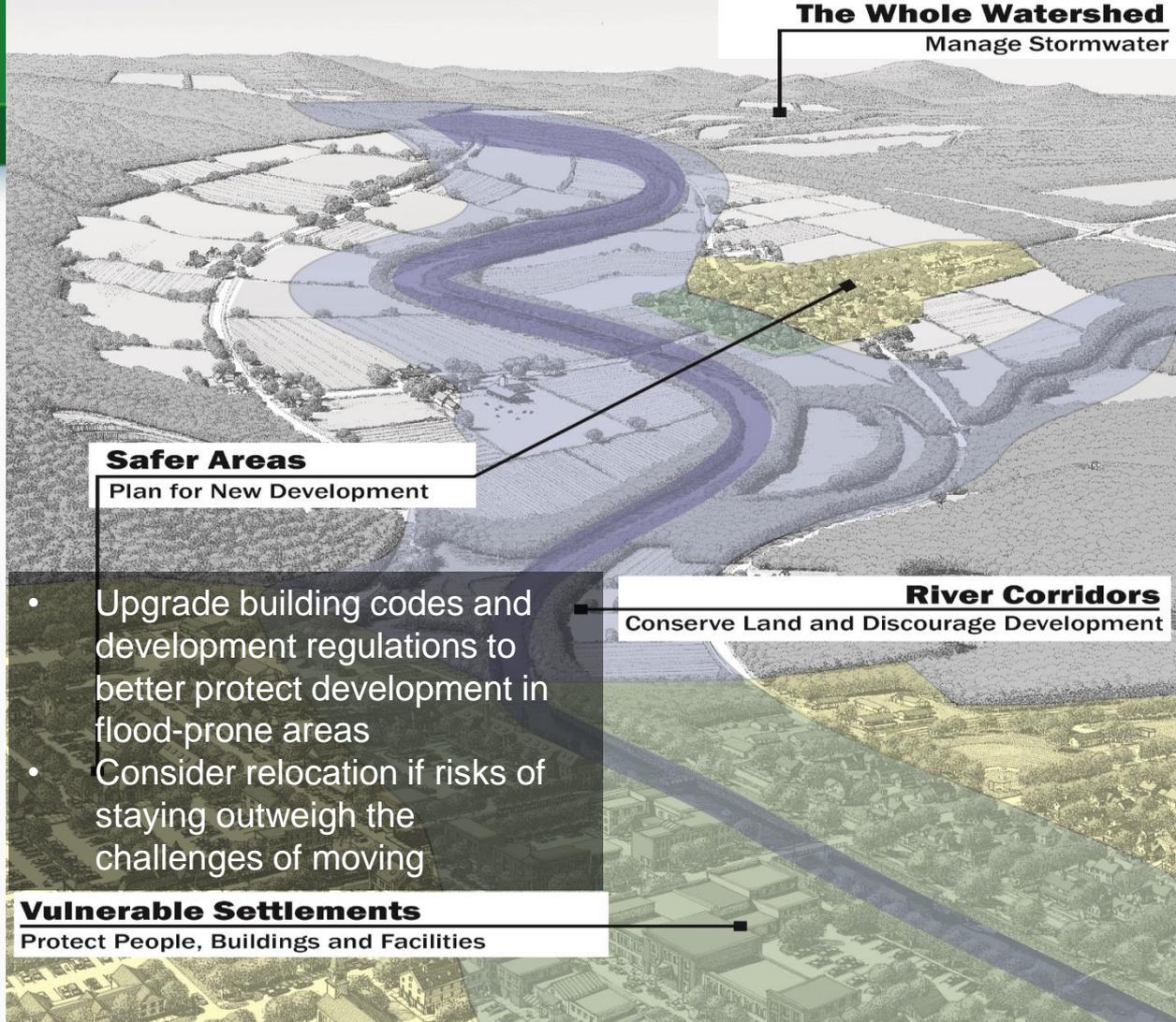
# Mad River Valley: Local Land Use Policies for Resilience

## River Corridors



# Mad River Valley: Local Land Use Policies for Resilience

## Vulnerable Settlements



**The Whole Watershed**  
Manage Stormwater

**Safer Areas**  
Plan for New Development

- Upgrade building codes and development regulations to better protect development in flood-prone areas
- Consider relocation if risks of staying outweigh the challenges of moving

**River Corridors**  
Conserve Land and Discourage Development

**Vulnerable Settlements**  
Protect People, Buildings and Facilities

# Mad River Valley: Local Land Use Policies for Resilience

## Safer Areas

- Designate new growth areas and prioritize infrastructure investments in safer locations
- Encourage compact, walkable development

### **Safer Areas**

Plan for New Development

### **The Whole Watershed**

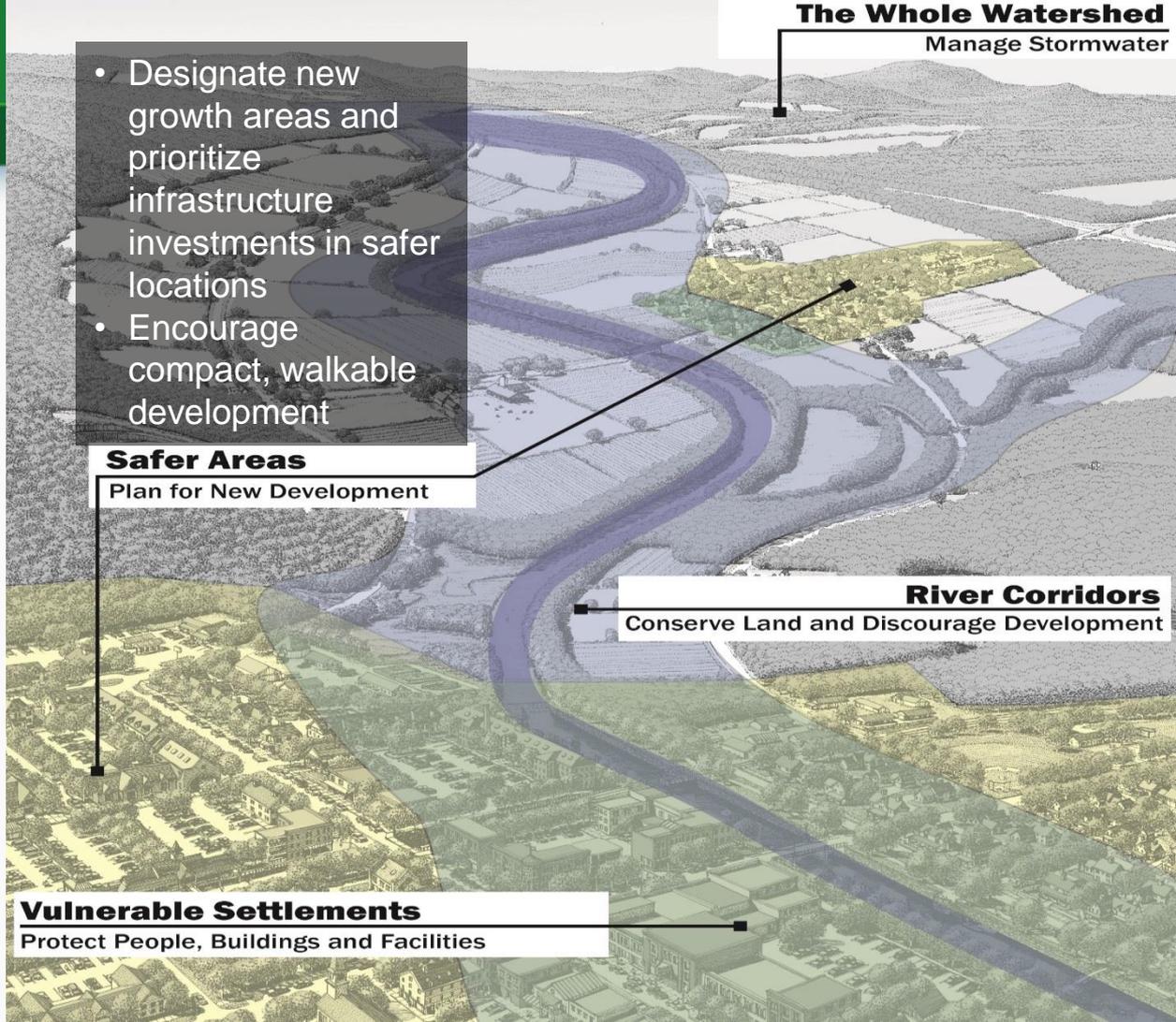
Manage Stormwater

### **River Corridors**

Conserve Land and Discourage Development

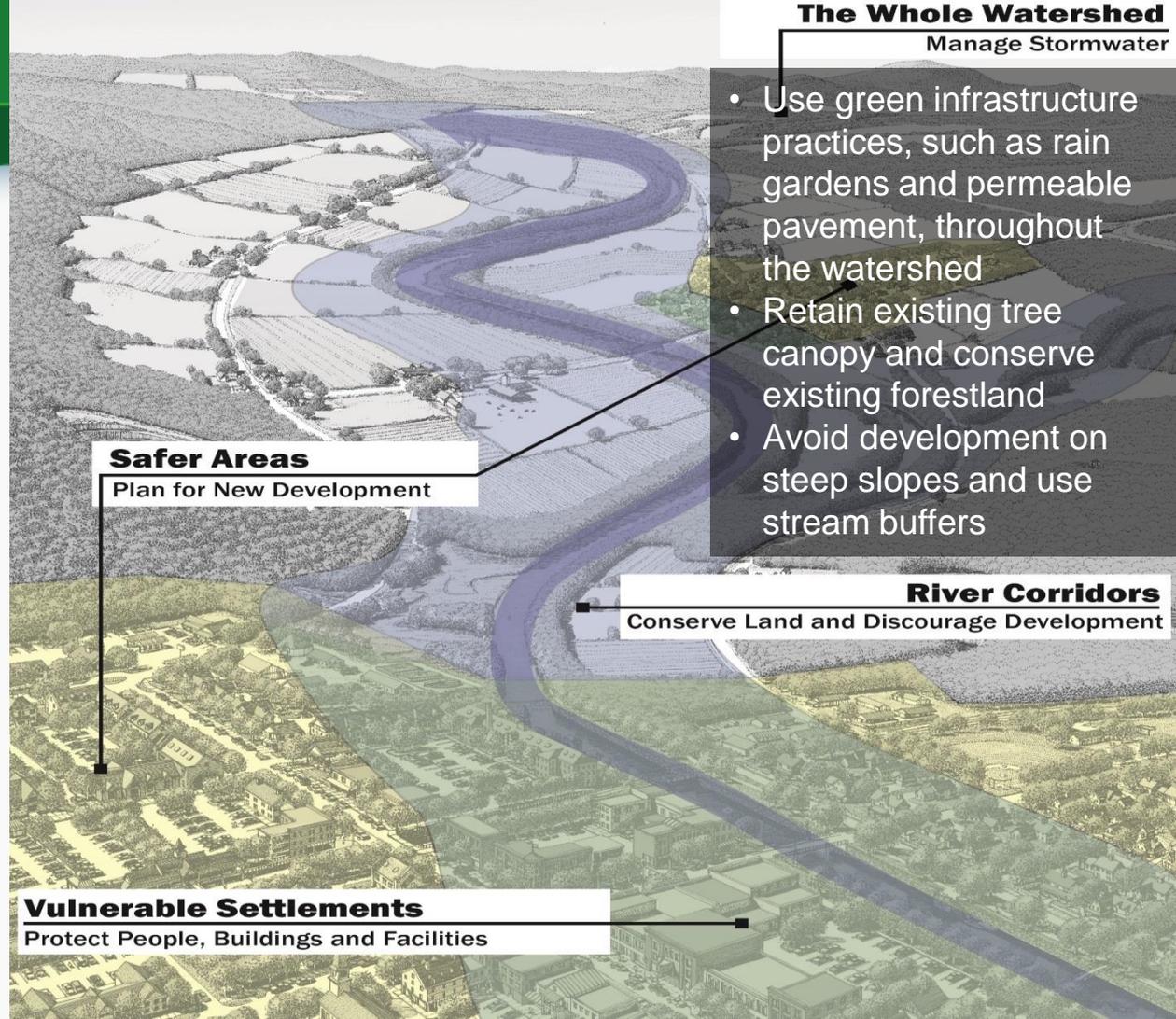
### **Vulnerable Settlements**

Protect People, Buildings and Facilities



# Mad River Valley: Local Land Use Policies for Resilience

## The Whole Watershed



### **The Whole Watershed** Manage Stormwater

- Use green infrastructure practices, such as rain gardens and permeable pavement, throughout the watershed
- Retain existing tree canopy and conserve existing forestland
- Avoid development on steep slopes and use stream buffers

**Safer Areas**  
Plan for New Development

**River Corridors**  
Conserve Land and Discourage Development

**Vulnerable Settlements**  
Protect People, Buildings and Facilities

# FLOOD RESILIENCE CHECKLIST

## Overall Strategies to Enhance Flood Resilience

(Learn more in Section 2, pp. 9-11 of

[\*Planning for Flood Recovery and Long-Term Resilience in Vermont\*](#))

1. Does the community's comprehensive plan have a hazard element or flood planning section?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
a. Does the comprehensive plan cross-reference the local Hazard Mitigation Plan and any disaster recovery plans?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b. Does the comprehensive plan identify flood- and erosion-prone areas, including river corridor and fluvial erosion hazard areas, if applicable?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c. Did the local government emergency response personnel, flood plain manager, and department of public works participate in developing/updating the comprehensive plan?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2. Does the community have a local Hazard Mitigation Plan approved by the Federal Emergency Management Agency (FEMA) and the state emergency management agency?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
a. Does the Hazard Mitigation Plan cross-reference the local comprehensive plan?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b. Was the local government planner or zoning administrator involved in developing/updating the Hazard Mitigation Plan?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

# Flood Resilience Checklist:

## Overall Strategies: *Selected Questions*



- Do you have a local comprehensive plan that guides future growth?
  - Does it include a hazard element or flood planning section?
  - Does it identify flood-prone areas?
  - Were emergency response personnel part of the process developing the plan?
- Do you have a local Hazard Mitigation Plan?
  - Does it cross-reference the local comprehensive plan?
  - Was the local planner/zoning administrator involved in writing the HMP?
- Do all community plans require or encourage green infrastructure techniques? Do they consider impacts of climate change on flood-prone areas?
- Do you participate in the National Flood Insurance Community Rating System?

# How Can You Use This Checklist?



- The current version of the Checklist (and the full report) is currently available on our EPA website, for any community to use:

<http://www.epa.gov/smartgrowth/smart-growth-implementation-assistance-project-summaries#vermont>

- The checklist has been expanded/revised through EPA's **Building Blocks for Sustainable Communities** program to include coastal community considerations and additional green infrastructure approaches.
- New version of the checklist was piloted in 5 communities in 2015, eventually will be available online.
  - Mobile, Alabama
  - Newburyport, Massachusetts
  - New Paltz, New York
  - Santa Ynez Band of Chumash Indians, California
  - Scituate, Massachusetts

<http://www.epa.gov/smartgrowth/building-blocks-sustainable-communities>

# Application of Green Infrastructure

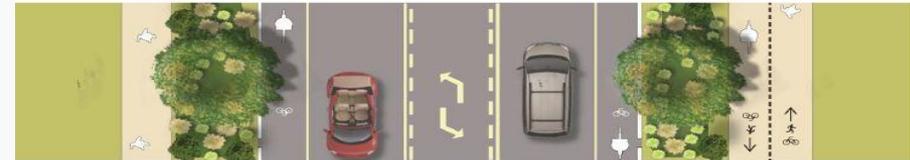
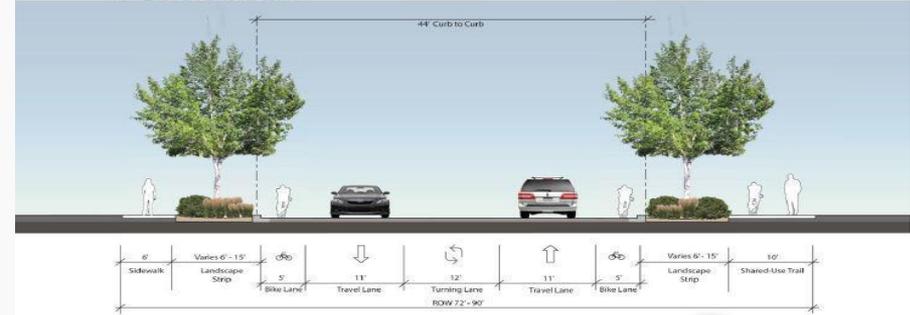


## Plazas, Parks, and Public Places – 2015 National Award for Smart Growth Achievement Riverfront Park Newark, New Jersey

Community input was integral to the design of this park, built on a formerly contaminated site. The park reconnects Newark to its river for the first time in decades and is attracting economic development in the adjacent downtown, giving a working-class neighborhood a beautiful and much-needed place to play and relax, and preserving open space along the river that can protect neighborhoods from flooding.



## EPA Technical Assistance Joplin, Missouri Complete/Green Streets September 2013





# State-Level Efforts

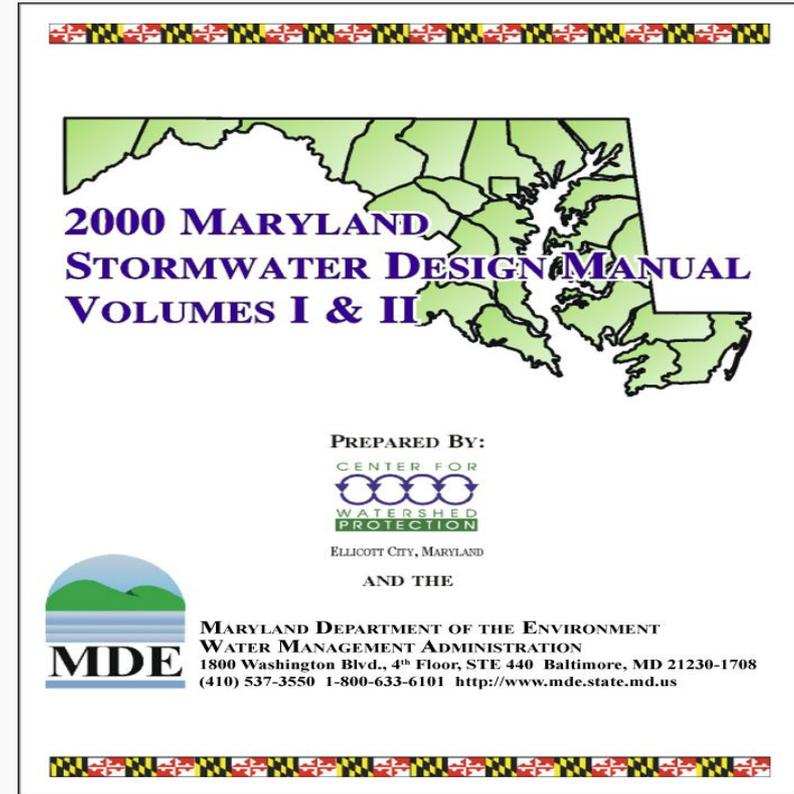


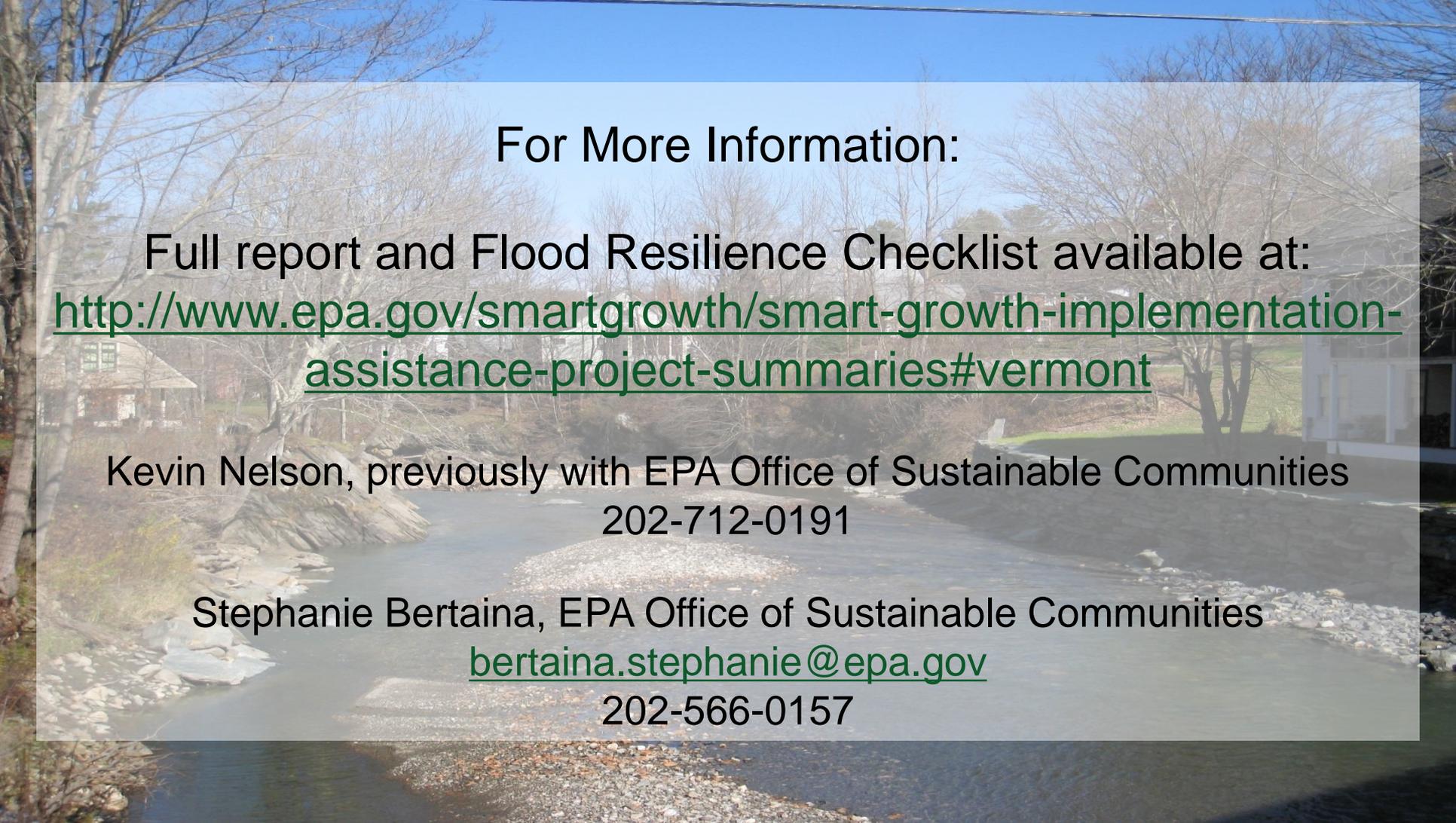
The Iowa Smart Planning Act was signed into law on April 26, 2010. This bill has three components:

1. Articulates ten Iowa Smart Planning Principles for application in local comprehensive plan development and public investment decision-making,
2. Provides comprehensive planning guidance for cities and counties, and
3. Establishes the Iowa Smart Planning Task Force with various responsibilities.

## Iowa Smart Planning Principles:

1. Collaboration.
2. Efficiency, Transparency and Consistency.
3. Clean, Renewable and Efficient Energy.
4. Occupational Diversity.
5. Revitalization.
6. Housing Diversity.
7. Community Character.
8. Natural Resources and Agricultural Protection.
9. Sustainable Design.
10. Transportation diversity.





For More Information:

Full report and Flood Resilience Checklist available at:  
<http://www.epa.gov/smartgrowth/smart-growth-implementation-assistance-project-summaries#vermont>

Kevin Nelson, previously with EPA Office of Sustainable Communities  
202-712-0191

Stephanie Bertaina, EPA Office of Sustainable Communities  
[bertaina.stephanie@epa.gov](mailto:bertaina.stephanie@epa.gov)  
202-566-0157

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## Q & A



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## TABLE TASK ON REBUILDING & ENVIRONMENT

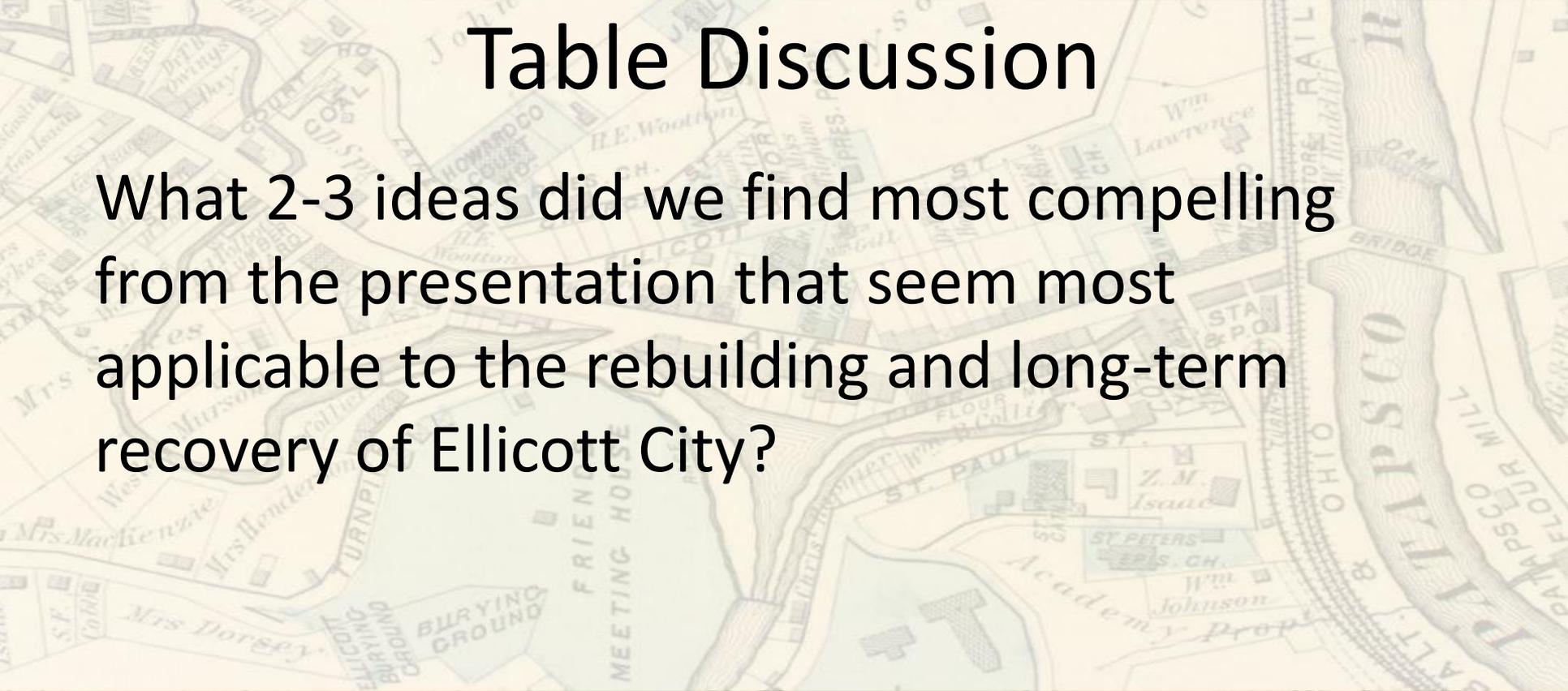


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## Table Discussion

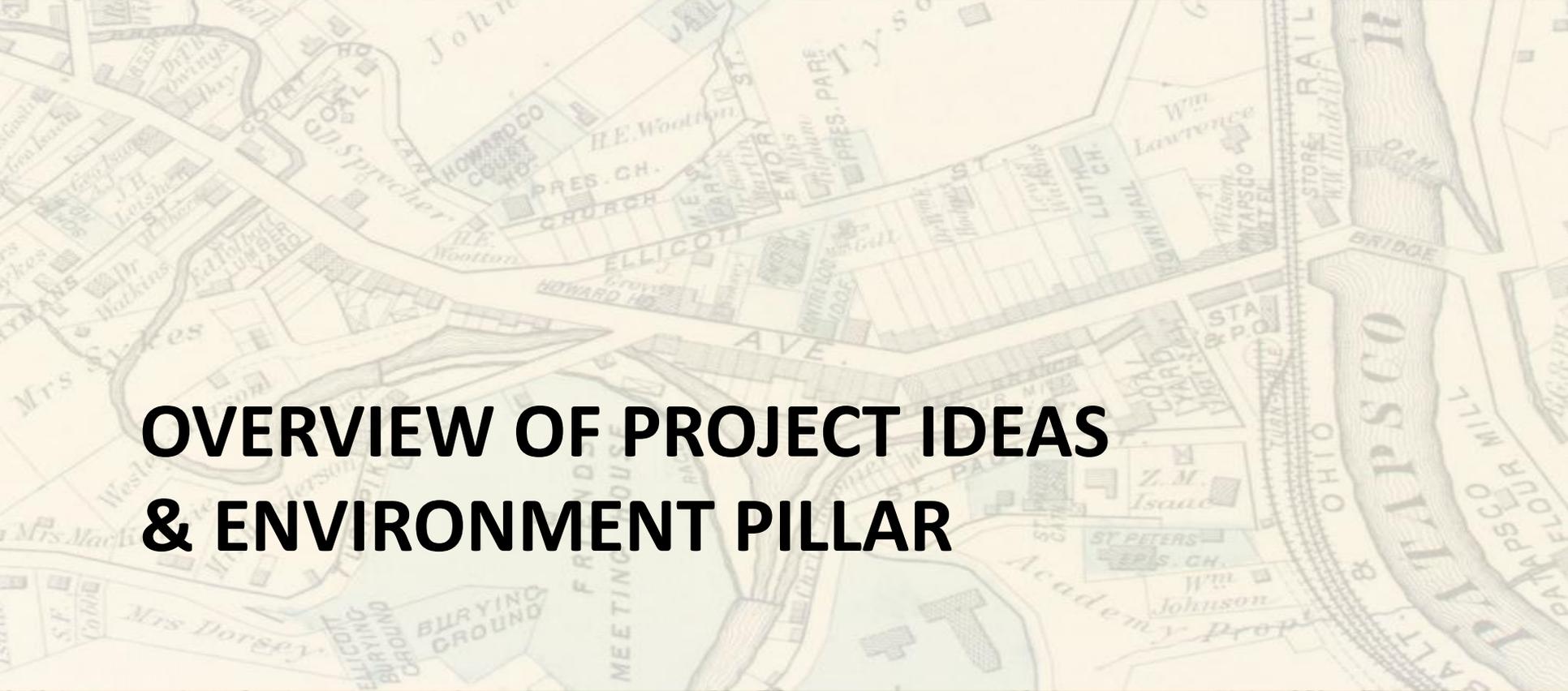
What 2-3 ideas did we find most compelling from the presentation that seem most applicable to the rebuilding and long-term recovery of Ellicott City?





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## OVERVIEW OF PROJECT IDEAS & ENVIRONMENT PILLAR



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**JOSEPH HERR  
RECOVERY MANAGER**

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## In Progress or Completed Projects



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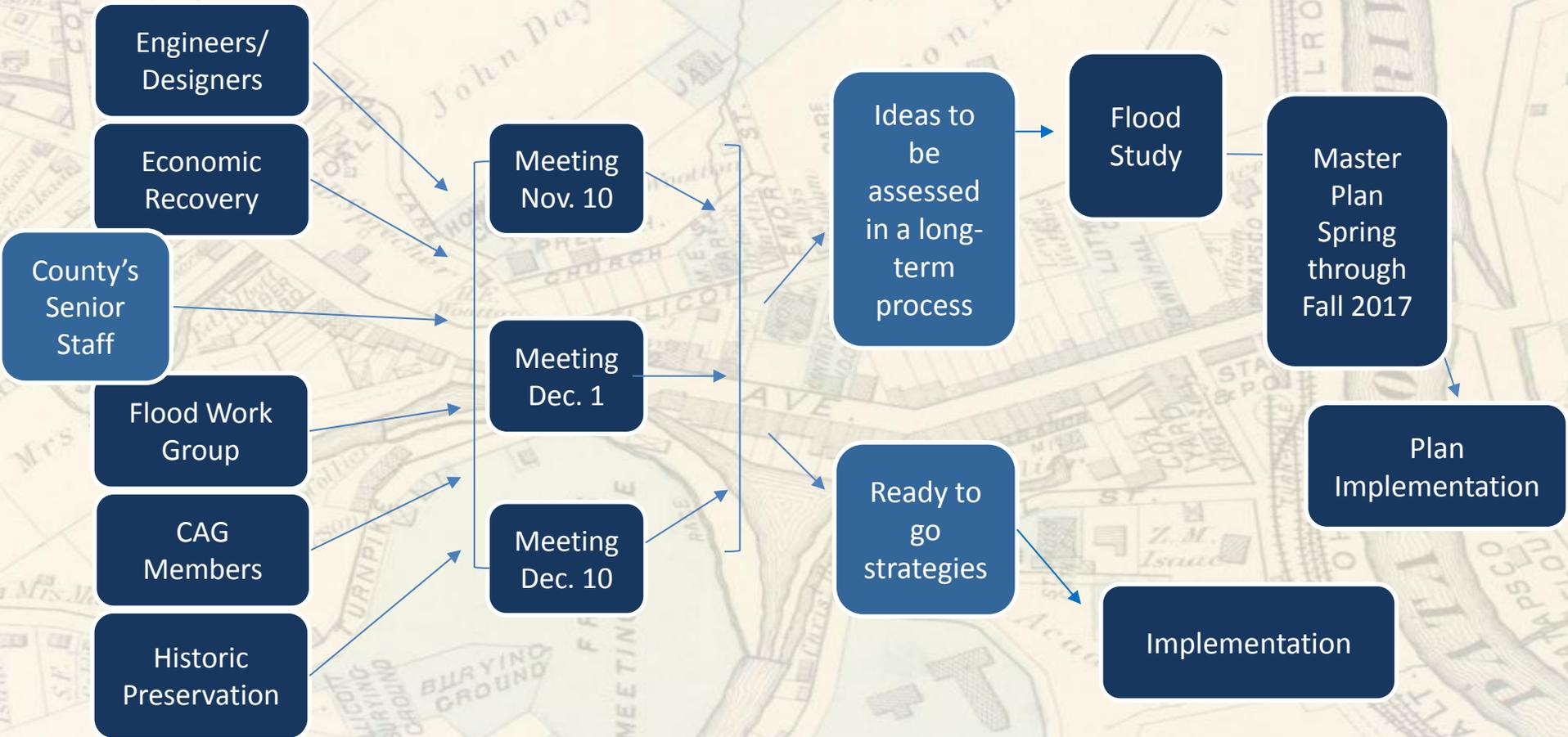
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# Process for Generating and Implementing rECovery Ideas



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Howard County, Maryland ... x +

https://www.howardcountymd.gov/Departments/Ellicott-City-Flood-Recovery/Community-Input

Search

## Give Us Your Ellicott City Project Ideas

### Not able to attend a meeting?

- See the list of [themes for ideas](#) generated so far (will be updated periodically)
- See all the ideas generated by community members (will be updated periodically)
  - [Economy](#)
  - [Environment](#)
  - [Preservation](#)
  - [Rebuilding](#)
  - [Other](#)
- Give us your ideas. **This is your opportunity to give us ideas for Ellicott City recovery projects.** *Please understand that while we value all ideas, projects will be evaluated, prioritized and funded based on their overall contribution to building a model resilient community.*

Have more ideas? Contribute online anytime at:  
[www.ECstrong.org](http://www.ECstrong.org)

## Project Idea Themes

### Rebuilding/Infrastructure

- Parking areas
- Sidewalks
- Utilities
- Retention
- Public amenities
- Channel improvements
- Transit
- Streets
- Flood gate

### Environment

- Native planting
- Improving open space
- Stormwater management
- Environmental education

### Economy

- Business preparedness
- Public access to historic sites
- Small business assistance
- Marketing and branding of Main Street
- Arts and entertainment district

### Preservation

- Historically appropriate restoration and rehabilitation
- Historical education
- Historic building maintenance

### Other

- Healing
- Public safety
- Regulatory measures
- Expand County staff dedicated to flood mitigation and preparedness
- Flood insurance



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## TABLE DISCUSSION REBUILDING AND THE ENVIRONMENT

## Rebuilding and Environment

- **REBUILDING:** Rebuild Historic Ellicott City with an emphasis on resilient infrastructure through flood mitigation
- **ENVIRONMENT:** Pursue and implement projects that ensure the continued vitality of our natural resources in pursuit of a sustainable quality of life

## Rebuilding and the Environment

- How well do these **rebuilding and environment** themes represent the kinds of projects we will need to consider during recovery?
- What critical themes seem to be missing in either of these categories?



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## Individual Task

- Fill out Project Idea template; hand to table facilitator

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**THEME TEAM**

## Compelling & Applicable Ideas for EC Recovery: THEMES

- Stormwater management through stricter regulations, green infrastructure, retention, etc.
- Better upstream and upland water management
- Utilize multi-tier approach involving all levels of government
- Have Howard County complete the EPA flood checklist
- Stricter policies on future development that lessens negative impact

## Critical Ideas/Themes Missing

- Review impact of Main St. and sidewalk
  - Repairing/rebuilding where the water is going
- Access to the river as an amenity and mark with plaques
- Maximize outdoor seating
- Small tree planting to break up asphalt
- Make river buffers wider

# Who do you think has a responsibility for reducing flooding risk? PRESS ALL THAT APPLY

63% 1. Federal Government

83% 2. State of Maryland

93% 3. Howard County Government

80% 4. The people in the area affected (myself, my neighbors)

30% 5. Other

# What are things I'm ready to commit to doing to help the environment and the rebuilding process? (press all that apply)

- 67% 1. Volunteer my time to clean up the streams or storm drains
- 80% 2. Landscape my property to accommodate stormwater
- 67% 3. Install a rain barrel(s) at my home or business
- 80% 4. Stay involved in the master plan process
- 50% 5. Donate to organizations working to rebuild Ellicott City
- 33% 6. Prepare a household flood plan/flood proof ground floor
- 17% 7. Other



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**MONICA FABBRI, SECRETARY  
ELLICOTT CITY – LONG TERM RECOVERY  
COMMITTEE (EC-LTRC)**



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**BILL WITHERS, BOARD MEMBER  
ELLICOTT CITY PARTNERSHIP (ECP)**



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**JULIJA SAJASKAS, DIRECTOR**  
**ROGER CARTER COMMUNITY CENTER**



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## Next Steps

Oct  
18

Nov  
10

Nov  
26

Dec  
1

Dec  
10



Most  
Impacted

Rebuilding &  
Environment

Small  
Business  
Saturday

Rebuilding &  
Economic  
Development

Rebuilding &  
Historic  
Preservation

Master  
Plan

Process

Spring –  
Fall 2017



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Visit us at  
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**THANK YOU!**