



Peeks Creek Landslide, Macon County, NC  
*Photo Source: Wikipedia*

# Clay Macon Regional Hazard Mitigation Plan Kickoff Meeting

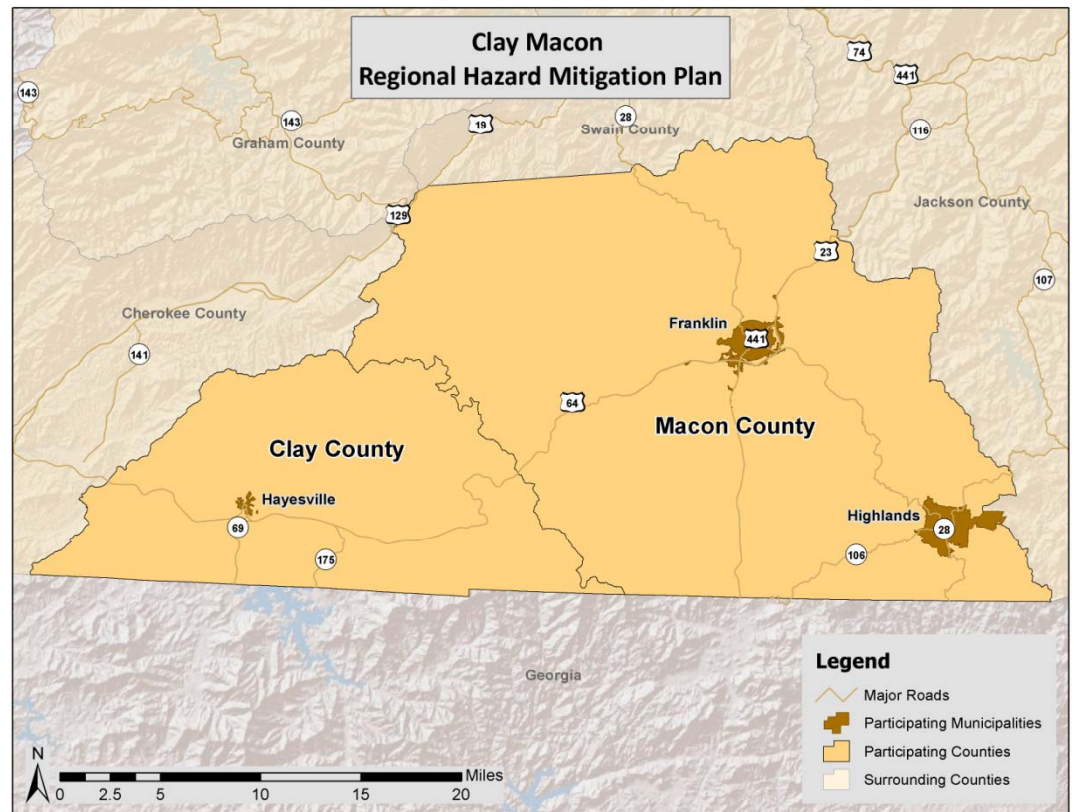
January 6, 2015

# Handouts

- Agenda
- Presentation Slides
- Data Collection Tools
  - Public Participation Survey

# Agenda

- Introductions
- Overview of Mitigation
  - Ice Breaker Exercise
- Project Overview
  - Key Objectives
  - Project Tasks
  - Project Schedule
  - Project Staffing
- Data Collection
- Roles & Responsibilities
- Next Steps
- Questions, Issues, or Concerns



# Introductions

- County Points of Contact
  - Clay: Ricky Lancaster
  - Macon: Warren Cabe
- HMPT Members
- NCEM
- Atkins
  - Nathan Slaughter, AICP, CFM

# Project Overview - What is Mitigation?



## "mit-i-gate"

1: to cause to become less harsh or hostile.

2: to make less severe or painful.



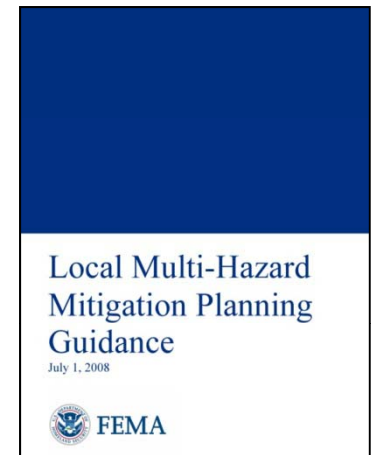
## Hazard Mitigation

Any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards.

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# Why Plan? Disaster Mitigation Act of 2000

- Revitalized Federal Planning Requirements
  - State and Local Hazard Mitigation Plans
- Federal Grant Funding Eligibility
  - Hazard Mitigation Grant Program (HMGP)
  - Pre-Disaster Mitigation (PDM)
  - Flood Mitigation Assistance (FMA)
- DMA 2000 is intended to facilitate cooperation between state and local authorities on risk reduction measures and to expedite funding allocation
- FEMA Resources (laws, regulations and guidance)  
<http://www.fema.gov/mitigation-planning-laws-regulations-guidance>



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# Why Plan? NC Senate Bill 300

- Passed in June of 2001, amends the North Carolina Emergency Management Act
  - Requires local hazard mitigation plans in order to remain eligible for Public Assistance (PA) for state-declared disasters

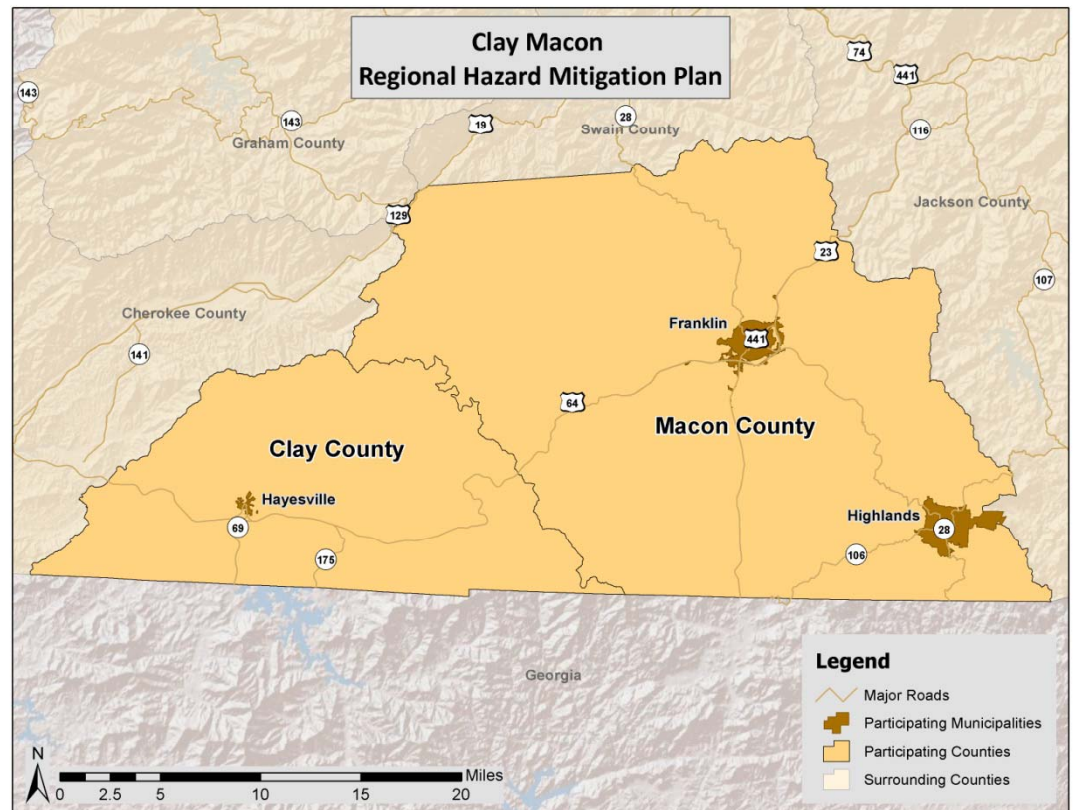
# Status of Current Plans

- Clay County
  - Expires 8/9/16
- Macon County
  - Expires 8/9/16



# Participating Jurisdictions

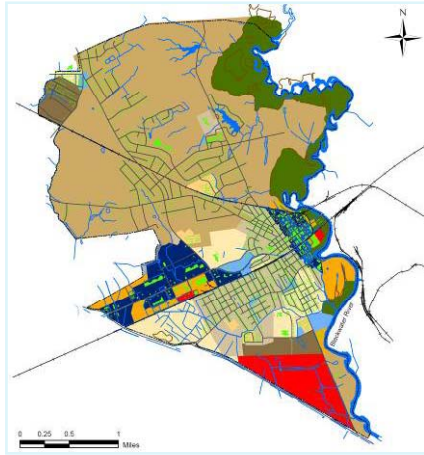
- **Clay County**
  - Hayesville
- **Macon County**
  - Franklin
  - Highlands



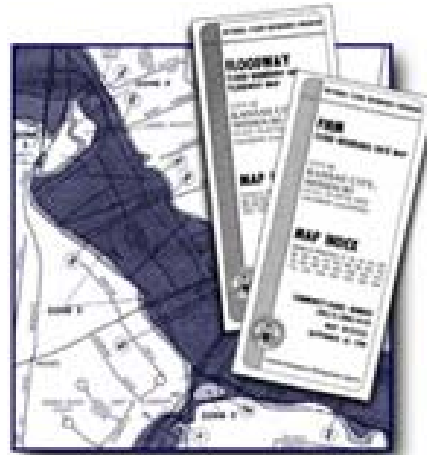
# Hazard Mitigation Techniques

- Prevention
- Property Protection
- Natural Resource Protection
- Structural Projects
- Emergency Services
- Public Education and Awareness

# Prevention

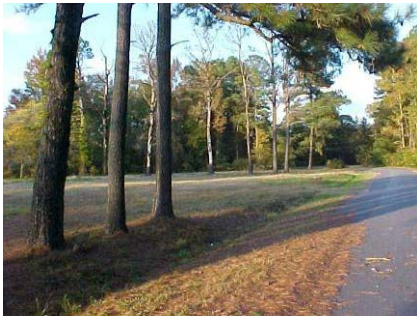


- Planning and zoning
- Building codes
- Open space preservation
- Floodplain regulations
- Stormwater management regulations
- Drainage system maintenance
- Capital improvements programming
- Setbacks



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# Property Protection



- Acquisition
- Relocation
- Building elevation
- Critical facilities protection
- Retrofitting
- Safe rooms, shutters, shatter-resistant glass
- Insurance



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# Natural Resource Protection



- Floodplain protection
- Watershed management
- Riparian buffers
- Forest management
- Erosion and sediment control
- Wetland preservation and restoration
- Habitat preservation

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# Structural Projects



- Reservoirs
- Dams, levees, dikes
- Floodwalls
- Stormwater diversions
- Detention/retention basins
- Channel modification
- Storm sewers

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# Emergency Services



- Warning systems
- Emergency response equipment
- Shelter Operations
- Evacuation planning and management
- Emergency response training and exercises
- Sandbagging for flood protection
- Installing temporary shutters

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# Public Education and Awareness

**BE PREPARED!**



**YOUR  
Disaster Checklist**



- Outreach projects
- Speaker series/  
demonstration events
- Hazard map information
- Real estate disclosure
- Library materials
- School children  
educational programs
- Hazard expositions

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# Ice Breaker Exercise

Prevention	Property Protection	Natural Resource Protection	Structural Projects	Emergency Services	Public Education/Awareness
Planning and zoning Building codes Open space preservation Floodplain regulations Stormwater management regulations Drainage system maintenance Capital improvements programming Setbacks	Acquisition Relocation Building elevation Critical facilities protection Retrofitting Safe rooms, shutters, shatter-resistant glass Insurance	Floodplain protection Watershed management Riparian buffers Forest management Erosion and sediment control Wetland preservation and restoration Habitat preservation	Reservoirs Dams, levees, dikes Floodwalls Stormwater diversions Detention/retention basins Channel modification Storm sewers	Warning systems Emergency response equipment Shelter Operations Evacuation planning and management Emergency response training and exercises Sandbagging for flood protection Temporary shutters	Outreach projects Speaker series/demonstration events Hazard map information Real estate disclosure Library materials School children educational programs Hazard expositions

# Key Objectives

- Merge two (2) county plans into one regional plan
- Complete update of existing plans to demonstrate progress and reflect current conditions
- Increase public awareness and education
- Maintain grant eligibility for participating jurisdictions
- Update plan in accordance with Community Rating System (CRS) requirements (although no current participants)
- Maintain compliance with State and Federal requirements



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# Project Tasks

1. Planning Process
2. Risk Assessment
3. Capability Assessment
4. Mitigation Strategy
5. Plan Maintenance
6. Documentation



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# Planning Process

- Develop a Hazard Mitigation Planning Team (HMPT)
- Widespread public participation and outreach to key stakeholders
- Data collection and analysis
- Plan preparation and submission



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# Risk Assessment

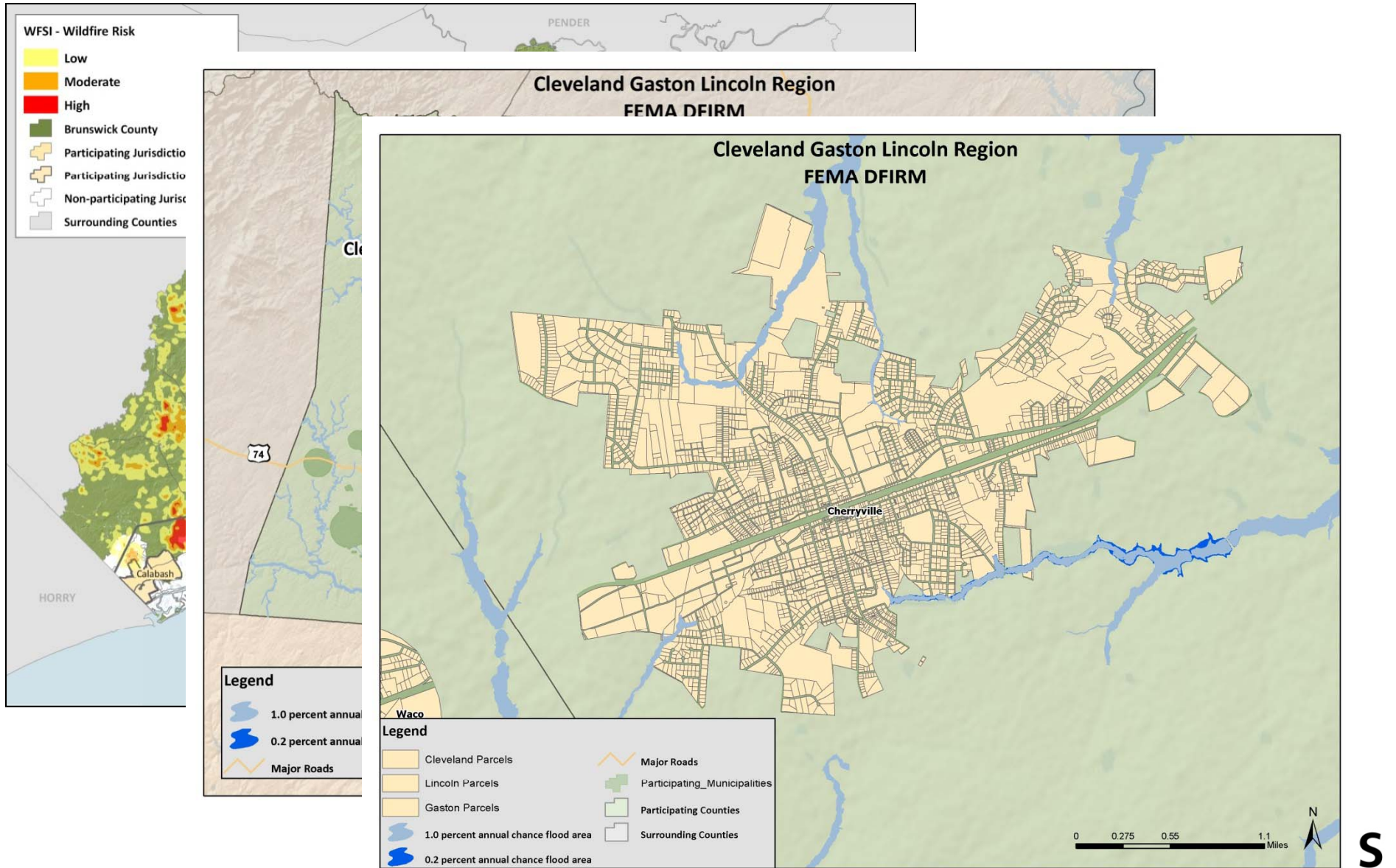
- Hazard Identification and Analysis
  - Detailed profiles for all natural hazards
    - Hazard description
    - Historical occurrences
    - Known hazard boundaries
  - Priority Risk Index (PRI)
- Vulnerability Assessment
  - Asset inventory (exposure)
  - Loss estimates
- Development Trends and Implications

# Hazard Identification

- We have identified the following as hazards that we will plan on analyzing in the Clay Macon plan:

ATMOSPHERIC HAZARDS	GEOLOGIC HAZARDS
<input type="checkbox"/> Avalanche	<input checked="" type="checkbox"/> Earthquake
<input checked="" type="checkbox"/> Drought	<input type="checkbox"/> Expansive Soils
<input checked="" type="checkbox"/> Hailstorm	<input checked="" type="checkbox"/> Landslide
<input checked="" type="checkbox"/> Heat Wave / Extreme Heat	<input type="checkbox"/> Land Subsidence
<input checked="" type="checkbox"/> Hurricane and Tropical Storm	<input type="checkbox"/> Tsunami
<input checked="" type="checkbox"/> Lightning	<input type="checkbox"/> Volcano
<input type="checkbox"/> Nor'easter	HYDROLOGIC HAZARDS
<input checked="" type="checkbox"/> Severe Thunderstorm	<input checked="" type="checkbox"/> Dam and Levee Failure
<input checked="" type="checkbox"/> Tornado	<input checked="" type="checkbox"/> Erosion
<input checked="" type="checkbox"/> Winter Storm and Freeze	<input checked="" type="checkbox"/> Flood
	<input type="checkbox"/> Storm Surge
	OTHER HAZARDS
	<input checked="" type="checkbox"/> Hazardous Materials Incident
	<input type="checkbox"/> Terror Threat
	<input checked="" type="checkbox"/> Wildfire
<input checked="" type="checkbox"/> = Hazard considered significant enough for further evaluation in the Clay Macon hazard risk assessment.	

# Vulnerability Assessment



# Capability Assessment

- Measures capability to implement hazard mitigation activities
- Identifies and targets gaps, conflicts and opportunities with existing local plans, programs, policies, etc.
- Identifies mitigation measures already in place or underway



# Capability Assessment

- Capability Assessment Survey
  - Measures existing capabilities
    - Planning and regulatory
    - Administrative and technical
    - Fiscal
    - Political

# Mitigation Strategy

- Mitigation Goals
  - Based upon findings of the risk and capability assessments
- Identification and analysis of mitigation measures
  - Prevention, property protection, natural resource protection, structural projects, emergency services, and public education and awareness

# Mitigation Action Plan

E  
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## **ACTION #17**

Amend the county's Manufactured Housing and Travel Trailer Park Ordinance to require tornado shelters for any new major manufactured/mobile home park with more than 30 mobile home spaces.

Category:	Property Protection
Hazard:	Tornadoes
Objective(s) Addressed:	2.3
Background:	Mobile homes are particularly vulnerable to damage from high winds. Residents, even those who live in mobile homes with tie-downs, should seek safe shelter when a tornado threatens. Tornado shelters should be constructed in major mobile home parks to ensure a safe place for residents to go during a tornado event. The shelter structure, which should be designed to withstand a minimum of 120mph winds, could easily serve an alternate purpose such as a community center, laundry facility, etc. Tornado shelters should be for last minute protection for high wind events but not serve as emergency shelters for other events such as hurricanes and tropical storms.
Priority:	Moderate
Funding Sources:	N/A
Responsibility Assigned to:	Planner
Target Completion Date:	June 1, 2004

Action

Category

Hazard

Objective(s)  
Addressed

Background

Priority

Funding Sources

Responsibility

Completion Date

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# Plan Maintenance

- Monitoring and reporting
- Evaluating and updating
- Implementation mechanisms
- Continued public involvement

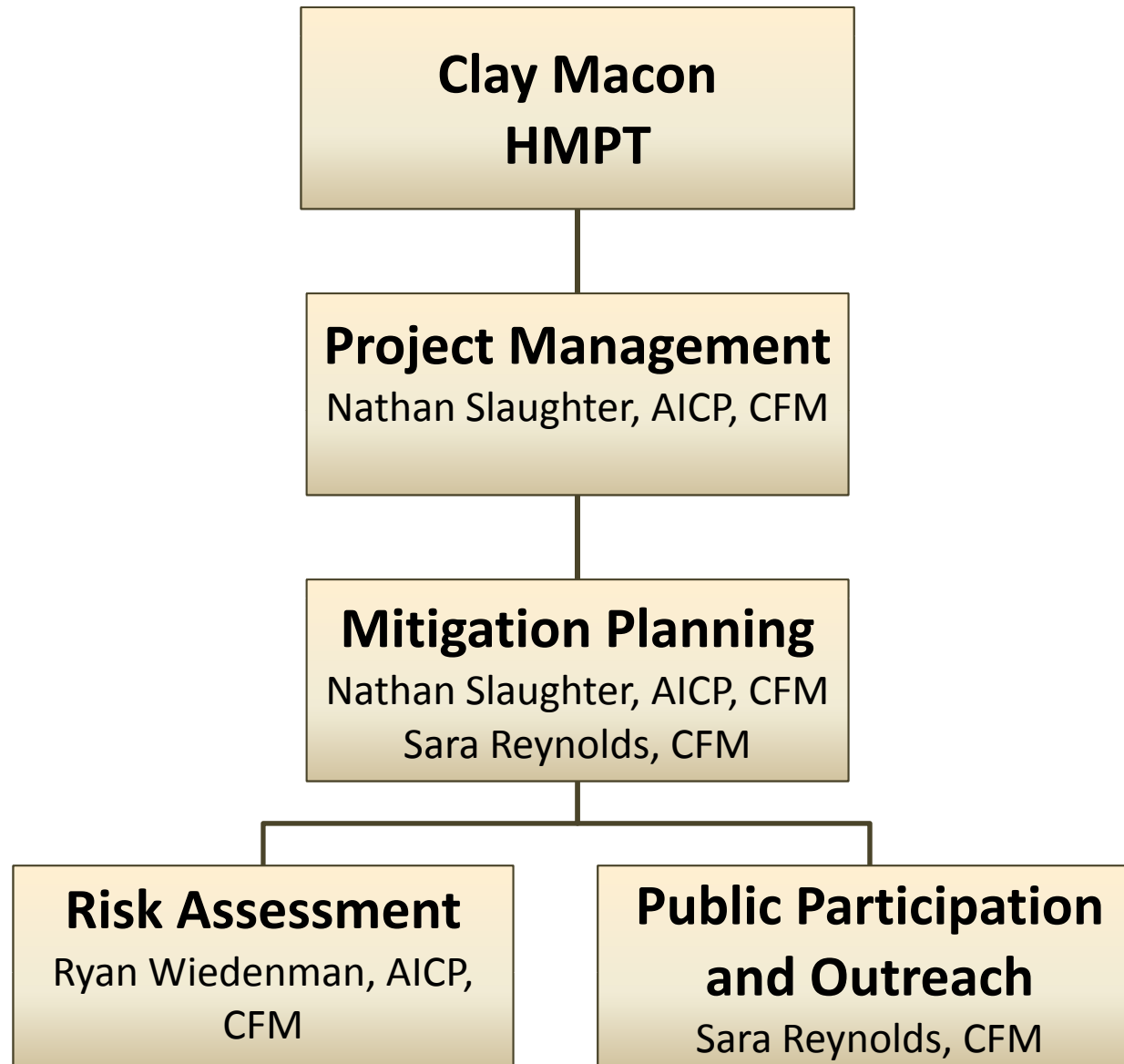
# Documentation

- Full description of planning process
  - Use of best available data
- Plan adoption
  - Local resolution required for final FEMA approval
- Local Mitigation Plan Review Tool

# Project Schedule

Project Tasks	Month										
	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV-JAN
Planning Process											
Risk Assessment											
Mitigation Strategy											
Plan Maintenance and Adoption											
<b>Meetings</b>											
Kickoff Meeting with Local Project Coordinator	√										
Regional Planning Committee Meetings	√				√				√		
Open Public Meetings					√				√		
<b>Milestones</b>											
Submission of Draft Risk Assessment to Regional Planning Committee										√	
Submission of Draft Risk Assessment to NCEM										√	
Completion of Final Plan/Conditional FEMA Approval											√
Local Adoption of Final Plan											√
Submission of Final Plan to NCEM/FEMA											√

# Project Staffing



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# Data Collection

- GIS Data Inventory
- Capability Assessment Survey
- Public Participation Survey
- Existing Mitigation Actions



# Public Participation Survey

- Provides an opportunity for the public to share opinions and participate in the planning process.
- Link to survey typically posted on County websites

<http://www.surveygizmo.com/s3/1947288/Public-Participation-Survey-for-Hazard-Mitigation-Planning-Clay-Macon>

# Roles / Responsibilities

- Atkins
- County Leads
- Participating Jurisdictions

# Roles / Responsibilities

## Atkins

- Technical Assistance
  - Planning guidance
  - State and federal compliance
- Data Collection & Analysis
  - Risk assessment
  - Capability assessment
  - Summarize results / report findings
- Facilitate HMPT meetings, workshops, and open public meetings
- Plan Preparation

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# Roles / Responsibilities

## County Leads

- Active participation in planning process
  - Data collection and exchange
  - Public awareness and stakeholder involvement
  - Arrange and host HMPT meetings
  - Mitigation strategy development
  - Plan review & feedback
- Project management
  - Central point of contact – Warren Cabe, Macon County
  - Communication and coordination with participating jurisdictions, NCEM and FEMA
- Plan Adoption

# Roles / Responsibilities

## Participating Jurisdictions

- Active participation in planning process
  - Data collection and exchange
  - Public awareness and stakeholder involvement
  - Attend HMPT meetings
  - Mitigation strategy development
  - Plan review & feedback
- Plan Adoption

# Next Steps

- Initiate data collection efforts
- Begin public outreach
- Discuss Hazard Mitigation Planning Team meeting



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