Nonstructural Flood Risk Management

✓ Nonstructural floodproofing
  ➢ Elevation
  ➢ Relocation
  ➢ Buyout/acquisition
  ➢ Dry floodproofing
  ➢ Wet floodproofing

✓ Nonphysical nonstructural measures
  ➢ Flood warning systems
  ➢ Flood insurance
  ➢ Floodplain mapping
  ➢ Flood emergency management plans
  ➢ Land use regulations
  ➢ Zoning
  ➢ Evacuation plans
  ➢ Risk communication
State programs

✓ Largely, state programs support federal programs

✓ States provide additional technical and administrative support
  ➢ “Delegation”

✓ Main state partners for flood risk management
  ➢ Kentucky Division of Water (KDOM)
  ➢ Kentucky Emergency Management (KYEM)
  ➢ Kentucky Dept. for Local Government (DLG)
Federal Agency Roles

✓ USACE
   - “Nation’s engineers”
     - Flood Risk Management
     - Regulatory
     - Planning

✓ FEMA
   - “Nation’s responders”
     - Response
     - Recovery
     - Mitigation
     - Planning

✓ EPA
   - “Nation’s regulators”
     - Clean Water Act
     - Drinking Water Act

✓ USGS
   - “Nation’s scientists”
     - Stream gauges
     - Data
     - Mapping

✓ NWS
   - “Nation’s weathermen”
     - Flood forecasts
     - Weather events

✓ HUD
   - “Nation’s housing department”
     - Housing
     - Infrastructure
State Agency Roles

✓ KYEM

 “State FEMA analog”
   Response
   Recovery
   Mitigation
   Planning

✓ DLG

 “State HUD analog”
   Housing
   Infrastructure
   Planning
   Funding

✓ KDOV

 “State EPA analog with FEMA crossovers”
   Regulatory
   Planning
    ▪ Infrastructure
    ▪ Environmental
   Natural hazards management
    ▪ Flood
    ▪ Drought
State Flood Risk Management Practices

✓ Most fall under the responsibility/mission of KDOW and KYEM
✓ Many program crossovers
✓ Collaboration with federal and local partners
State Programs Relating to Flood Risk Management

✔ KDOw
  ➢ National Flood Insurance Program (NFIP)
  ➢ Floodplain permitting
  ➢ Flood hazard mapping
  ➢ Dam Safety

✔ KYEM
  ➢ Public Assistance
  ➢ Individual Assistance
  ➢ Hazard Mitigation Assistance programs
    ❑ HMGP
    ❑ FMA
    ❑ PDM
State nonstructural programs

✓ Administration of National Flood Insurance Program
  ➢ Flood insurance
  ➢ Floodplain management
  ➢ Floodplain regulations
  ➢ Flood mitigation
Floodplain Management

✓ Series of best practices to manage current and future flood risks
  ➢ How do we better utilize flood prone areas?
  ➢ Floodplain is nature’s flood storage area
  ➢ Technical assistance
Floodplain regulations

- Rooted in land use regulations
- Ordinances for all NFIP participating communities
- Informs the mitigation and nonstructural flood risk management process
Flood Insurance

✓ Provides financial recourse for most flooding events
✓ Federal disaster declaration not required
✓ Required in conjunction with federally-backed loans
Floodplain Mapping

✓ Informs management, regulations and insurance

✓ Risk MAP
  ➢ Mapping
  ➢ Assessment
  ➢ Planning

✓ Ties flood hazard identification, flood risk assessment and hazard mitigation planning together
Management of FEMA HMA Programs

✓ KYEM

- Grants administration
- Program management
- State Hazard Mitigation Council
Kentucky Flood Control Match Fund

- Authorized through KRS 147A.029
- Administered by KY Dept. for Local Government
- May be used as matching funds by local governments for flood-related projects with:
  - USACE
  - FEMA
  - Other federal agencies
Questions?

Carey Johnson
Kentucky Division of Water
carey.johnson@ky.gov