Flood Maps and Levee Certification
Moderator - Doug Bellomo, FEMA

• **Levee Protected Area Definition**
  • Groups did not come up with a clear definition
    – Focuses were:
      • Keep it simple so that public will understand
      • Area inundated if the levee were to fail/overtop or worse case scenario
      • 2 extremes – assume “with levee” and “without levee” extents – may be the best case for insurance rating purposes
    – Whatever the definition, the extent of the area needs to be realistic
  • Should be defined as “affected area” not “protected area”
  • Difficult to define because extents could be different if consider overtopping of system, failure of levee, etc. Systems are unique and flooding behind them are also unique
  • Need to keep in mind that, at this point in time, we are identifying areas for flood insurance rating
  • Often focused the definition in relationship to certification rather than looking beyond the certification issue
    – Definition tended to focus on how best to map the levee protected area
    – Related the levee protected area to an insurance zone designation (i.e. Zone L, Zone XL, Zone AL, etc.)
    – Some observations for levee protected area is it depends on the audience you are speaking to. May need multiple maps to address such things as general awareness and emergency response

• **Type of insurance**
  • Not consensus but leaning toward the requirement of flood insurance
  • Consider a new zone behind levees and insurance rating should be something between shaded Zone X and Zone A/AE
  • Acknowledge that all levees are unique and insurance should not be the same behind all
  • For rating purposes, take into account things like:
    • level of protection provided by the system
    • uncertainties in the operation and maintenance of the levee system
    • whether or not communities have evacuation plans, etc.
  • When required, insurance keeps individuals aware of the potential risk

• **Type of floodplain management**
  • Consensus that building standards and floodplain management in levee protected areas need to be unique and possibly managed differently
    – Need to incorporate emergency response plans and evacuation plans
  • Level of protection changes over time for levees and current floodplain management requirements “or lack of requirements” for areas behind accredited levees is not good practice
• Consider setting minimum floodplain management standards for areas behind levees – easier to enforce/implement on local level.
• Need to focus on flood depths and at a minimum, ensure communities are elevating to interior drainage levels.
• Need to look at building standards for areas impacted by levee that have deep flooding. Slab on grade may not be appropriate. An immediate concern would be dealing with critical facilities and where they should be located in the floodplain.

• **Certification Process:**
  • Most burning issue that needs to be addressed
  • Need to do a better job of educating public on this topic.
  • Need to have more guidance or standard for certification
  • Potential for different standards based on protected area (rural vs. urban)
  • Need to keep focus on good sound engineering judgment
  • Need to address what an adequate certification look like; what methodology is required (i.e. number of and location of borings).
  • Need to consider documentation that shows there is a taxing authority to show a continuous funding stream
  • Need to look at the possibility of setting a frequency for re-certification

• **Life during/after PAL process:**
  • 2nd most burning issue
  • Challenges in meeting deadlines (24 months)
    • FEMA needs a plan now for dealing with “post-PAL” process
    • Plan must be well coordinated and communicated