Introduction to the Webinar: Why are we doing this?

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Southern Climate Impacts Planning Program

Funded by NOAA.

Established in 2008.

Mission: To increase resiliency and preparedness for weather and climate extremes now and in the future across the south central United States.

www.southernclimate.org
Motivation: Arkansas experiences many climate extremes and hazards and they are expensive.
# Hazards are Costly

Arkansas Disasters, 2000-2016: 28

FEMA Assistance, 2012-2016: $69 Million!

<table>
<thead>
<tr>
<th>Date of Event</th>
<th>Hazard(s)</th>
<th>Total FEMA Assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/8/16-3/13/16</td>
<td>Severe Storms, Tornadoes, Straight-line Winds, and Flooding</td>
<td>$2,105,934.33</td>
</tr>
<tr>
<td>12/26/15-1/22/16</td>
<td>Severe Storms, Tornadoes, Straight-line Winds, and Flooding</td>
<td>$11,404,364.20</td>
</tr>
<tr>
<td>5/7/15-6/15/15</td>
<td>Severe Storms, Tornadoes, Straight-line Winds, and Flooding</td>
<td>$12,370,019.31</td>
</tr>
<tr>
<td>4/27/14-4/28/14</td>
<td>Severe Storms, Tornadoes, and Flooding</td>
<td>$12,611,701.98</td>
</tr>
<tr>
<td>12/5/13-12/7/13</td>
<td>Severe Winter Storm</td>
<td>$5,587,008.61</td>
</tr>
<tr>
<td>8/8/13-8/14/13</td>
<td>Severe Storms and Flooding</td>
<td>$8,171,830.52</td>
</tr>
<tr>
<td>5/30/13-6/3/13</td>
<td>Severe Storms, Tornadoes, and Flooding</td>
<td>$8,395,922.32</td>
</tr>
<tr>
<td>5/25/12-5/26/12</td>
<td>Severe Winter Storm</td>
<td>$8,548,088.10</td>
</tr>
<tr>
<td><strong>Total, last 5 years (2012-2016)</strong></td>
<td></td>
<td><strong>$69,194,869.37</strong></td>
</tr>
</tbody>
</table>

$4 are saved for every $1 FEMA spends on hazard mitigation (National Institute of Building Sciences 2005).
Let’s get on the same page...

- Hazard mitigation can = climate adaptation
  - **Adaptation:** Increase culvert size to accommodate heavier rain events in the future.
  - **Mitigation:** Increase culvert size to address existing flooding issues.
  - **Adaptation:** Make odd/even watering rules the norm because of more drought expected in the future.
  - **Mitigation:** Make odd/even watering rules the norm because of water challenges that arise during existing droughts.

- For today’s webinar, mitigation = hazard mitigation, not carbon emissions mitigation.
Resilience

Godschalk et al. (2009):

Instead of repeated damage and continual demands for federal disaster assistance, resilient communities proactively protect themselves against hazards, build self-sufficiency and become more sustainable.

Resilience is the capacity to absorb severe shock and return to a desired state following a disaster. It involves technical, organizational, social and economic dimensions. . . . It is fostered not only by government, but also by individual, organization and business actions.
Why should emergency managers and planners work together?

- EMs typically take the lead on addressing hazards in their communities. p. iii

- EMs view risk from an all-hazard perspective which means they grasp how a particular solution can help address multiple hazards. p. 8

- “EMs are unlikely to be trained in designing and conducting a collaborative planning process or facilitating public involvement…” p. 8
APA Hazard Mitigation Publication

- Unique planner’s skill: “The ability to think comprehensively about the challenges facing a community . . . Many other local government professionals are trained to manage particular and often isolated functions.” p. 5

- Few planners are trained to understand how hazards influence growth and development. p. 5
Complementary Strengths & Weaknesses

- EMs have local hazard knowledge (though not always long term climatological perspective) but think and plan on operational timescales.
- Planners think comprehensively about communities and on longer timescales but don’t necessarily have the hazard knowledge.
Why the need for accurate, usable hazard climatologies?

Recency bias.
Why the need for accurate, usable hazard climatologies?

Recency bias.

Personnel turnover.

Climate data (longer timescales) can inform climate-related decisions.
Webinar Outcomes

1. Introduce the idea for how emergency managers and planners can collaborate together.

2. Increase awareness of hazard mitigation planning and disaster resilience.