TESTIMONY of

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before

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Committee on Banking, Housing, and Urban Affairs

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Good morning Chairman Shelby, and Members of the Subcommittee. I am Scott Edelman, Senior Vice President of AECOM. I have spent my career solely focused on solving our Nation's water related opportunities and challenges. I appreciate this opportunity to appear today before the Committee on Banking, Housing, and Urban Affairs

I have been involved with creating maps for FEMA since 1981, and am privileged to be serving as Vice Chair on the Technical Mapping Advisory Committee established by the 112th Congress.

We, as a nation, have simply endured too much pain and suffering due to floods.

I believe that Roy Wright's strong support and encouragement of the TMAC has resulted in two reports that show a path to the next evolution of the NFIP. In the future, I believe that if the recommendations of the TMAC reports are supported by Congress and the Administration, we can make significant strides to reduce both the pain and suffering that our citizens are enduring at a record level, and the burden these unprecedented events continue to drain resources from our United States Treasury.

Of the 29 recommendations contained in the TMAC 2015 reports, I believe that the three most important priorities and potential benefits are:

- 1) The re-introduction of a 5 year rolling plan to allow leveraging of Federal dollars
- 2) The movement to structure based risk assessments to create a safer nation

3) Preparing the nation for future conditions – to stop building new problems

First, the reinstatement of a five year rolling plan allows the leveraging of local and state dollars. FEMA cannot make the nation a safe place alone. The operating principals of FEMA's Whole Community doctrine is critical as applied to flood related mitigation. Flood waters know no jurisdictional boundaries as they devastate lives and property, and therefore we need to fully engage local communities and make these shared responsibilities more apparent to all. When Congress funded Map Modernization in 2003, FEMA produced the Multi-Year Flood Hazard Identification Plan, MHIP. MHIP addressed every county in the nation with when and how much anticipated funding would be available. The result was an enterprise wide approach to maximize the return on Federal investments in which FEMA served as the Chief Risk Officer to those investment in the studies, and communities felt strong local ownership of the studies and results. This approach better aligned FEMA with state and local efforts to reduce losses of life and property.

Second is structure based risk assessments. We must change the perception that if I am just on the other side of the 100-year flood line I am safe. Too much time is spent trying to justify the movement of the flood line by a few feet when in actuality the risk of flooding the structure only has changed ever so slightly. Much of the problem is due to uncertainty of the flood line itself.

- To my knowledge, this is the only product that engineers produce and communicate to the public that deals with averages and not what is safe.
- We also have a great deal of uncertainty within the calculations. In all actuality, the current 100-year average line shown on the flood insurance maps is perhaps closer to a safe design level of a 10-year event.

Moving to a structure based risk assessment begins to change the conversation from one focused on "in vs out" to one that starts to communicate levels of risk. We must also take affordability and grandfathering with sunset clauses into account for our most vulnerable communities and constituents.

Third, we need to prepare the nation for the future. GAO asked FEMA to evaluate the impact of future conditions on the National Flood Insurance Program. The report concluded that

by the year 2100 on average our floodplains will increase by 45% nationally, the number of polices will increase by 80% and our average loss per policy will increase by 50% based on today's dollars. This is an immense challenge to our country. We need to encourage local communities to adopt higher standards on a volunteer basis understanding that the higher standards results in less loss of life. Many communities have done this including Mecklenburg County and the City of Charlotte NC. Based on their adoption of future conditions flood elevations, Mecklenburg County has estimated savings from flood damages from a single 100-year event to be over \$150 Million. We need to stop building future problems so we can finally concentrate on mitigation of existing problems.

My passion is not solely on the science but the need to help the nation with this long-standing challenge and the billions of tax dollars that are unnecessarily wasted because of poor land use decisions and the attempt to tame or ignore Mother Nature. I want to again thank the Committee for this opportunity. I urge members of the committee to refer to the two TMAC reports for more details as a formal part of our testimony.

I would be happy to answer any questions that you may have.