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January 30, 2012

Regulatory Affairs Division  
Office of Chief Counsel  
Federal Emergency Management Agency  
Room 835  
500 C Street SW  
Washington, DC 20472-3100

Re: Docket ID FEMA-2011-0025

Sir/Madam:

The following comments are submitted regarding the proposed “Revised Analysis and Mapping Procedures for Non-Accredited Levees” (the “Procedures”).

Summary

In general, the Procedures represent an attempt to provide some very limited relief to a community protected by a de-accredited levee system. Unfortunately, the Procedures represent an add-on to an already flawed analytical and administrative process leading to de-accreditation. The simple fact is that we need better information and good analysis from the outset to justify the truly critical de-accreditation decision and the flood insurance rate maps that result from that decision. Simply producing digital maps that have the appearance of technical accuracy has not proven credible, leading to continuing disputes (including the widespread objection to the “without levee” approach that led to the development of the Procedures) and damaging FEMA’s legitimate interests in better informing the public about flood risk. The proposed Procedures are simply a way of rationalizing the flaws in the existing process. Further, they do not resolve the continuing concern of quantifying flood risk for the purpose of establishing a reasoned actuarial and analytical basis for flood insurance rates.

While admittedly a response to direction from Congress, the Procedures attempt to put an analytical (“technically sound”) patina on measures to reduce the impact of a de-accreditation decision, actually creating more

confusion about a process that is already bewildering to the public and belying FEMA's stated aim of the Procedures being "understandable to stakeholders." Contrary to representations made in the document, this is not actually the promised "more robust analysis and mapping procedure" to identify accurate flood risks, but a process to obscure the basic inadequacies of the existing levee accreditation and mapping process.

*The benefits of a community making the significant investment in executing the outlined Procedures will be very small, at best resulting in certain areas being reclassified as "Zone D," reflecting continued uncertainty about flood protection. The Procedures should clearly compare the requirements and impacts of a Zone D classification vs. A, AE or X so that communities can make more a more informed choice about how and whether to spend the substantial sums required to execute the proposed Procedures.*

While the enhanced level of community engagement described in the Procedures is welcome, the agency's track record in our area of implementing engagement requirements of existing federal statutes and rules is poor. The Procedures would benefit from additional steps to assure accountability for executing both existing and proposed community engagement requirements.

The agency's exclusion of documented and effective flood fighting and operational measures in considering either accreditation or the proposed Zone D classification is a conspicuous and arbitrary omission of a proven risk reduction measure.

#### Local Impact of the Approach and Community Engagement

The Procedures provide an opportunity for a community to provide local knowledge, input, data, and analyses regarding a de-accredited (or potentially de-accredited) levee system. This is a positive element to the Procedures but it does not recognize the substantial cost of providing such information and the impossible dilemma it creates. To obtain the necessary data and analysis from a registered professional engineer to fulfill the requirements of any one of the analytical processes outlined in the Procedures will be costly and time-consuming, with no certainty that the outcome will be beneficial – resources that would likely be better spent on capital improvements that would contribute to restoring the levee system to accredited status under 44 CFR 65.10. This is an enormous burden to place on local governments or levee sponsors and does not fully assimilate the potential contribution of federal agencies, like the Corps of Engineers, who already collect and analyze similar information.

The guidelines provide for several public and stakeholder meetings at which the public is provided the opportunity to engage in this process. FEMA, however, needs to fully recognize the economically destabilizing impacts of the engagement process. Re-mapping creates uncertainty and has the effect of chilling private investment in levee protected areas until completion of the re-mapping project, a process that can take upwards of 3 years. Communicating that a particular levee has been de-accredited and will only be eligible for a "Zone D" designation will further add to the uncertainty of economic investment in the affected area and for urban areas, freeze development due to impending flood insurance requirements. The Procedures need to provide more input from local development and finance communities on the impact of the proposed re-mapping classification so that local decision makers can determine if they want to engage in this process or undertake a restoration project.

If a community engages in this process, the best it can hope for is a "Zone D" floodplain classification. While Zone D does not currently trigger the mandatory flood insurance purchase requirements under the National Flood Insurance Program, such a designation will automatically impose development restrictions required under local floodplain ordinances and will likely lead lenders in the area to require purchase of unsubsidized flood insurance for private persons to obtain financing. While the Procedures outlined will provide a detailed picture of the flood risks behind the de-accredited levee system, engaging in the process outlined in the document will likely provide little benefit to the community other than removing existing critical infrastructure from the floodplain. The Procedures provide a new option for affected communities but FEMA needs to communicate the *very limited benefit* to stakeholders early in the process.

### Transparency

The Procedures clearly state that the process should be conducted in a clear and transparent manner. In practice, however, FEMA often makes internal decisions without consultation with local stakeholders and without providing justification for those decisions. Further, the agency has too often given short shrift to the local engagement procedures required by existing federal statutes and rules. The Procedures would be greatly enhanced if they included (a) an ombudsman or monitor from the local community as a member the Local Levee Working Group whose sole responsibility is to monitor the process for compliance with federal and state laws, rules, and regulations regarding notice, process, and decision-making transparency, (b) provide a mechanism for the local monitor to report violations of applicable transparency laws to a federal auditor, administrative board, or a federal

court having continuing jurisdiction over the re-mapping process, (c) make all reports that FEMA could create under these Procedures mandatory and provide a thirty (30) day comment period prior to any public meeting, and (d) require FEMA officials and Local Levee Working Group to provide such reports and make presentations at regular meetings of the local governing body having jurisdiction over the levee system.

#### Accreditation Decision

The Procedures make clear that accreditation criteria under 44 CFR 65.10 are not being changed. And the proposed Procedures assume that there is an *a priori* de-accreditation decision, so that serious decision is not technically a concern of the subject document. That said, there needs to be a more cooperative, collaborative, and technically sound basis for making this truly critical decision. There needs to be a much higher level of cooperation and data-sharing among state and local agencies, and agreement on reasonable technical methods to apply to the decision-making process.

The accreditation decision is critical and often substantial costs are incurred by communities or levee sponsors on the data collection and analysis to demonstrate compliance with the accreditation criteria. Likely, a community will use the information gathered in the initial accreditation process outlined in the Procedures for mapping on the landside of its de-accredited levee system. If a community, however, spends more of its resources to engage in the process decision and determines that the initial accreditation decision was incorrect, the Procedures provide no enhanced mechanisms to appeal or re-evaluate the initial levee accreditation decision. The only process that would be available to a community would be an administrative appeal after the FIRM has been published – a process that could take years from the initial accreditation decision to determine and imposing a huge economic cost on the community. The Procedures need to provide a limited review after fully engaging in the de-accredit levee mapping process to consider whether any additional information provided through the process changes the initial determination that the levee system has not met the accreditation criteria described in 44 CFR 65.10.

#### Flood Fighting

In the context of an initial accreditation decision where the landside of a levee system will be classified as a “Zone X,” FEMA does not consider flood fighting since the agency does not believe such measures are reliable enough to fully protect from a Base Flood Event. However, in the context in which a levee is de-accredited and

there is uncertain risk on the landside of the levee, documented flood fighting and operations measures should be considered as effective approaches to reduce the extent of areas classified as a SFHA. The Procedures currently do not account for flood fighting measures that have historically been demonstrated to improve the protection provided by levee systems during a Base Flood Event.

Certain flood fighting measures that provide for under-seepage control, increased freeboard, and levee armoring or strengthening are critical measures that provide enhanced protection during a flood event. Indeed, many communities have a history of flood fighting and other emergency measures that have effectively protected landward property and that FEMA can rely upon to evaluate the effectiveness of those measures in determining whether an area will be inundated. For example, the levee system in our area survived the record flood event in 1993, arguably a 300-year event, despite FEMA's contention that the system cannot be accredited to protect from a 100-year event. Part of the reason that the system was able to provide adequate protection in this circumstance was an organized and diligent reconnaissance and flood fighting effort. Recognizing the role of effective flood fighting and a clear operations plan is consistent with the "Zone D" classification concept, which is proposed for usage in areas of uncertain flood risk. Flood fighting, by its nature, may not be effective as a structural solution to eliminate the likelihood of a levee failure, but it can predictably reduce flood risk .

Documented and effective flood fighting and operational techniques should be fully recognized as additional risk reduction measures after all other procedures have been applied. A community should provide its emergency plan along with data from a registered professional engineer modeling the effectiveness of the measures included within the emergency plan. For example, if the Freeboard Deficient or Overtopping procedure creates a SFHA, then the Local Levee Working Group should consider whether flood fighting measures that increase freeboard (e.g., sandbagging, levee push-ups, interlocking freeboard extensions, etc.) could adequately address the potential for overtopping of the levee during a Base Flood Event. If the Structural-Based Inundation procedure creates a SFHA, then the Local Levee Working Group should also consider whether enhance reconnaissance combined with flood fighting measures such as emergency levee armoring and underseepage controls can adequately address the potential for levee failure. The Local Levee Working Group should consider historical evidence of the effectiveness of these measures as well as advances in flood fighting measures that could be adopted. The effect of considering flood fighting would be to reduce the area considered to be a

SFHA and thereby create a larger Zone D area behind the de-accredited levee system.

### Technical Approach

The *Sound Reach Procedure* is very ambiguous. To be considered a sound reach, a community/levee owner must provide an "Operations plan and Maintenance plan that *discusses* closures, interior drainage management and the stability, height, and overall integrity of the levee and its associated structures and systems." This infers an O&M plan that includes "discussion" of these issues is all that is needed. Yet the standards for a sound reach are stipulated in 44 CFR 65.10. So inevitably, a sound reach is equivalent to an 'accredited' reach. Of course, FEMA does not allow segments of a levee to be accredited -- thus the ambiguity. The reward for this process is a Zone D (no different than the natural valley procedure discussed below).

The *Freeboard Deficient Procedure* forces the process through the structurally sound criteria defined in the *Sound Reach Procedure*. This method will require the same basic amount of work effort as the sound reach and defaults to using existing accreditation standards. The end result is a Zone D (no different than the natural valley procedure discussed below).

The *Overtopping Procedure* will likely never be used since it requires a professional engineer to provide an analysis of the levee overtopping and then affirm (through signature and seal) that the levee overtopping "will not result in structural failure." It is difficult to believe that any registered engineer will guarantee the performance of a levee under those circumstances, and thereby assume substantial liability.

The *Structural-Based Inundation Procedure* is entirely subjective. FEMA will ultimately determine whether this methodology is appropriate for a levee reach, not the levee owner or their engineer. As with any levee, accredited or not, a structural failure of a levee is possible but is more likely to occur at the locations of known or historic deficiencies. Therefore, it would be logical for this procedure to include the failure analysis of the levee at the location of known deficiencies locations rather than arbitrarily determined locations. Given that there are allegedly specific and known deficiencies in a de-accredited levee would suggest that the procedure would recognize those conditions at the outset. Instead, the description of this procedure ignores known information and requires the use of two breach locations, one at the upstream end of the reach and one at the downstream end of the reach in

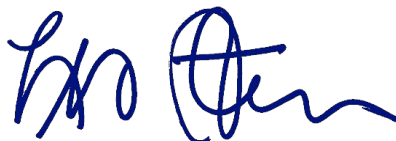
an attempt to maximize the SFHA. If failure analysis is to be included in any risk based analysis then it makes more sense to use historical observations and actual data to model this scenario, rather than an approach designed to artificially maximize the SFHA.

The application of the *Natural Valley Procedure* is the *de facto* “without levee” analysis. It is a minimum data approach (and least costly). There appears to be a discontinuity between using this procedure for the development of a SFHA or a Zone D. To determine a SFHA a somewhat detailed analysis is required to establish base flood elevations (BFEs). However, why would a levee owner spend the money to determine a SFHA if the default would be to map the same area as a Zone D? Most levee owners/communities will simply allow a Zone D to be mapped.

One of the goals of this FEMA document was to provide a “more robust analysis and mapping procedure” to accurately identify flood risks. We certainly appreciate the difficulty in achieving that ambitious and laudable goal. Unfortunately, in the end it appears that the Procedures do little more than create the illusion of precision and sophistication, without providing any better understanding of risk or more accuracy in the depictions of SFHAs on flood insurance rate maps. Clearly, the entire process of evaluating the flood protection provided by levee systems and the consequent mapping of flood risk will be a long-term and evolving process requiring far more time and effort than was provided to develop the subject Procedures. FEMA needs to closely examine whether adding on these Procedures to an existing process that is, by all accounts, flawed and in need of reform will further the public interest. Rather, the effort should be devoted to resolving the underlying problems that have caused Congress and the public such great concern.

Thank you for the opportunity to provide the foregoing comments regarding the proposed Procedures. We look forward to participating in continuing discussions concerning the development of this document.

Sincerely,



Les Sterman

Chief Supervisor of Construction and the Works

Docket ID FEMA-2011-0025

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cc: Board of Directors  
Hon. Mark Kern  
Hon. Alan Dunstan  
Hon. Delbert Wittenauer  
Hon. Richard Durbin  
Hon. Mark Kirk  
Hon. Jerry Costello  
Hon. John Shimkus